# Installation Instructions

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

30", 36" and 48" Professional Vent Hoods

Models: ZV48T, ZV48S ZV36T, ZV36S ZV30T, ZV30S



# **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 this vent hood requires 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.

# CAUTION:

Due to the weight and size of these vent hoods and to reduce the risk of personal injury or damage to the product, **TWO PEOPLE ARE REQUIRED FOR PROPER INSTALLA-TION.** 

# PRUDENCE

À cause du poids et de la taille de ces hottes et pour reduire le risque de blessures et de dommages, IL FAUT DEUX PERSONNES POUR FAIRE L'INSTALLATION CORRECTE-MENT.

# WARNING:

To reduce the risk of fire or electrical shock, do not use this range hood with any external solid-state speed control device. Any such alteration from original factory wiring could result in damage to the unit and/or create an electrical safety hazard.

# AVERTISSEMENT

Pour réduire le risque d'incendie ou de choc électrique, il ne faut pas utiliser cette hotte avec un régulateur de vitesse électronique externe. Toute modification de ce type du branchement d'usine peute endommager l'appareil ou créer un risque de choc électrique.

TO REDUCE THE RISK OF FIRE, USE ONLY METAL DUCT-WORK.

# WARNING:

# TO REDUCE THE RISK OF FIRE, ELECTRICAL SHOCK OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:

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

#### **AVERTISSEMENT** POUR RÉDUIRE LE RISQUE D'INCENDIE, DE CHOC ÉLECTRIQUE OU DE BLESSURES, IL FAUT OBSERVER LES REGLES SUIVANTES:

- A. Utiliser cet appareil uniquement de la maniére prévue par le fabricant. En cas de question, consulter le fabricant.
- **B.** Avant toute intervention ou nettoyage, couper l'alimentation électrique au disjoncteur et verrouiller le panneau du disjoncteur pour éviter la mise sous tension accidentelle. S'il n'est pas possible de verrouiller le panneau du disconcteur, attacher un placard ou une étiquette trés visible au panneau.
- For general ventilating use only. Do not use to exhaust hazardous or explosive materials or vapors.
- Structural framing, 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 National Fire Protection Association (NFPA), and the American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), and the local code authorities.
- Local codes vary. Installation electrical connections and grounding must comply with applicable codes. In the absence of local codes, the vent should be installed in accordance with National Electrical Code ANSI/NFPA 70-1990 or latest edition.

**CAUTION:** To reduce risk of fire and to properly exhaust air, be sure to duct air outside – Do not vent exhaust air into spaces within walls or ceilings or into attics, crawl spaces, or garages.

**PRUDENCE**II faut prendre soin d'installer un conduit vers l'extérieur pour réduire le risque d'incendie et pouvoir évacuer l'air correctement.

Il ne faut pas évacuer l'air correctement. Il ne faut pas évacuer l'air dans l'espace entre les parois d'un mur, un plafond ou un grenier, un espace sanitaire ou un garage.

### CONTENTS

Product Dimensions	3
Installation Clearances	
Optional Duct Cover Accessories	
Installation Height, Duct Cover Accessories	5
Advance Planning	6
Power Supply	
Duct Fittings	
Tools and Materials Required	
Remove the Packaging	
Parts Provided	

Step 1, Determine Ductwork and Wiring Locations	
Step 2A, Install Hood Onto Wall	11
Step 2B, Install Hood Beneath Soffit	12
Step 3, Connect Ductwork	13
Step 4, Connect Electrical	13
Step 5, Install Duct Covers	13
Step 6, Install Motor	14
Step 7, Install Filters	14
Step 8, Install Implement Rods	15

#### **PRODUCT DIMENSIONS** 47-15/16" 12 18' () Monogram $\Theta \Theta$ . 00 15 Æ -25" 47-15/16<del>"</del> Model ZV48S With Straight Sides 35-15/16 **,**12" 18' $\Theta \Theta$ . D 15 Ð 35-15/16 25" Model ZV36S With Straight Sides 12 29-15/16 18" () Barryan $\Theta \Theta$ D 6 Æ - 29-15/16<del>"</del> 25" Model ZV30S With Straight Sides



Model ZV48T With Tapered Sides



Model ZV36T With Tapered Sides



### INSTALLATION CLEARANCES

These vent hoods are designed to be installed onto a wall or beneath a soffit or cabinet.

- Install these hoods\* 30" Min. to 36" Max. above the cooking surface.
- \*These hoods may be installed 24" min. above a gas or electric drop-in style cooktop. Always observe the 30" to 36" clearance when installed over any professional style cooktop or range.

**Note**: Clearances may vary due to type of cooking product and local codes. Check with local inspectors to be sure standard is applicable.



In this installation the ductwork running from the top of the hood will be concealed in the soffit or upper cabinetry.



For this installation, a decorative duct cover is available to conceal the ductwork running from the top of the hood. Use of the duct cover requires special consideration to the installation height above the countertop.

### OPTIONAL DUCT COVER ACCESSORIES

Standard decorative duct covers are available in 6" and 12" heights. Duct covers may be stacked, in various combinations, to conceal the ductwork running from the top of the hood to the ceiling.

• Before you begin, you should determine the installation height of the hood and order the correct size duct cover. The duct covers should be ordered at the same time as the vent hood and be on site before installation. Order the duct cover corresponding to your model.



#### 6" Duct Covers

Hood Model	6" Duct Cover	Dimensions
ZV48T, ZV48S	ZX48DC6	6"H × 19-11/16"W × 11-7/8"D
ZV36T, ZV36S	ZX36DC6	6"H x 15-3/4"W x 11-7/8"D
ZV30T, ZV30S	ZX36DC6	6"H x 15-3/4"W x 11-7/8"D

#### 12" Duct Covers

#### Hood Model 12" Duct Cover Dimensions

ZV48T, ZV48S	ZX48DC12	12"H x 19-11/16"W x 11-7/8"D
ZV36T, ZV36S	ZX36DC12	12"H x 15-3/4"W x 11-7/8"D
ZV30T, ZV30S	ZX36DC12	12"H × 15-3/4"W × 11-7/8"D

## DETERMINE INSTALLATION HEIGHT, DUCT COVER ACCESSORIES

These vent hoods must be installed 30" min. to 36" max. above the standard 36" high cooking surface. The exact hood installation height is determined by the ceiling height.

- **1.** Measure the exact ceiling height.
- **2.** Review the chart at right to determine the range of possible hood installation heights that can be accomplished with one or more duct covers.
- **3.** Increase or decrease hood installation height to accommodate the fixed 6" or 12" duct covers.
- **4.** Duct covers may be stacked, in various combinations, to reach ceiling heights.

Straight or Taper-Sided Hoods



Actual Ceiling Height	*Possible Hood Installation Height	6" Duct Covers	12" Duct Covers
7' 11"	35"	1	
8' 0"	30"		1
8' 0"	36"	1	
8' 1"	31"		1
8' 2"	32"		1
8' 3"	33"		1
8' 4"	34"		1
8' 5"	35"		1
8' 6"	30"	1	1
8' 6"	36"		1
8' 7"	31"	1	1
8' 8"	32"	1	1
8' 9"	33"	1	1
8' 10"	34"	1	1
8' 11"	35"	1	1
9' 0"	30"		2
9' 0"	36"	1	1
9' 1"	31"		2
9' 2"	32"		2
9' 3"	33"		2
9' 4"	34"		2
9' 5"	35"		2
9' 6"	30"		2
9' 6"	36"	1	1
9' 7"	31"	1	2
9' 8"	32"	1	2
9' 9"	33"	1	2
9' 10"	34"	1	2
9' 11"	35"	1	2
10' 0"	30"		3
10' 0"	36"	1	2
10' 1"	31"		3
10' 2"	32"		3
10' 3"	33"		3
10' 4"	34"		3

\*Based on 36" countertop height. **Note:** Additional duct covers may be used to reach higher ceilings.

# ADVANCE PLANNING

#### **Ductwork Planning**

- These vent hoods are equipped for 10" round ductwork. For best performance, use 10" round ductwork on the 48" wide hoods. 30" and 36" hoods may be transitioned to 8" round.
- This hood may be vented vertically through upper cabinets, soffit or ceiling. A duct transition piece is supplied for vertical exhaust. Use locally supplied elbows to vent horizontally through the rear wall.
- Determine the exact location of the vent hood.
- Plan the route for venting exhaust to the outdoors.
- Use the shortest and straightest duct route possible. For satisfactory performance, duct run should not exceed 150 ft. equivalent length for any duct configurations.
- Refer to "Duct Fittings" chart to compute the maximum permissible length for duct runs to the out-doors.
- Use metal ductwork only.
- Install a wall cap or roof cap with damper at the exterior opening. Order the wall or roof cap and any transition needed in advance.

#### Wall Framing for Adequate Support

- These vent hoods are heavy. Adequate structural support must be provided. Hoods must be secured to vertical studs in the wall.
- It is strongly recommend that the vent hood with duct cover be on site before final framing and wall finishing. This will also help to accurately locate the ductwork and electrical service.

#### **Decorative Duct Covers:**

Decorative duct covers, 6" and 12" high, are available to fit all models. The duct cover conceals the ductwork running from the top of the hood to the ceiling or soffit. Stack one or more duct covers over the top of the hood to reach your ceiling height.

### **POWER SUPPLY**

IMPORTANT - (Please read carefully)

# WARNING:

FOR PERSONAL SAFETY, THIS APPLIANCE MUST BE PROP-ERLY GROUNDED.

#### **AVERTISSEMENT** – POUR DES RAI-SONS DE SÉCURITÉ, CET APPAREIL DOIT ÊTRE CORRECTE-

SONS DE SECURITE, CET APPAREIL DOIT ETRE CORRECTE-MENT MIS À LA TERRE.

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 codes or prevailing local codes and ordinances.

### **Electrical supply**

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

- Wiring must be 2 wire with ground.
- If the electrical supply does not meet the above requirements, call a licensed electrician before proceeding.
- Route house wiring as close to the installation location as possible on the back wall or ceiling.
- Connect the wiring to the house wiring in accordance with local codes.

#### Grounding instructions

The grounding conductor must be connected to a ground metal, permanent wiring system, or an equipment-grounding terminal or lead on the hood.

**WARNING:** The improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service representative if you are in doubt whether the appliance is properly grounded.

# AVERTISSEMENT

Le mauvais branchement du fil de mise à la terre peut causer un choc électrique. En cas de doute, consulter un électricien qualifié ou un technicien pour déterminer si l'appareil est à la terre.

# **Advance Planning**

# **DUCT FITTINGS**

Use this chart to compute maximum permissable lengths for duct runs to outdoors.

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

# Maximum recommended duct length for these hoods: 150 feet

#### 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.

**Note:** Any home ventilation system, such as a ventilation hood, 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.

#### Hoods Are Equipped For 10" Round Duct

\*Hoods are supplied with a 10" round transition. A locally supplied transition is required for other sizes.

*Note:* Outlet on top of hood is 8-1/8" × 8".

\*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 ventilation hood.

Duct Piece		Equivalent Length*	Quantity Used	Total Lengti
$\bigcap$				
$\square$	10" round	- 4		
$\bigcirc$	to 8" round	5 ft.		
	Round,	1 ft.		
	straight	(per foot length)		
	3-1/4" × 10"	1 ft.		
	3-1/4" x 12" straight	(per foot length)		
₩	J IN A IZ Straight	(per loot length)		
AD		8" Dia. 17 ft.		
	90° elbow	10" Dia. 24 ft.		
$\bigcirc$		8" Dia. 10 ft.		
Y	45° elbow	10" Dia. 14 ft.		
	3-1¦4" × 12"	15 ft.		
	3-1/4" × 10"	14 ft.		
	90° elbow			
$\land$	3-1/4" × 10"	8 ft.		
	3-1/4" × 12"	9 ft.		
$\forall$	45° elbow			
$\frown$	3-1/4" × 10"	33 ft.		
$\bigtriangledown$	3-1/4" × 12"	36 ft.		
	90° flat elbow			
$ \land $	10" round transition			
	to 3-1/4" x 10" or 3-1/4" x 12"	9 ft.		
~~	3-1/4" x 10" or	J 10.		
	3-1/4" x 10" 01 3-1/4" x 12" to			
	10" round transition	6 ft.		
	10" round to 3-1/4" x 10"	16 ft.		
K	3-1/4" x 12" transition	13 ft.		
	90° elbow			
	3-1/4" × 10"	9 ft.		
<b>K</b>	3-1/4" x 12" to 10" round	8 ft.		
VEN I	transition 90° elbow			
AM	Round	8" Dia. 32 ft.		
	wall cap	10" Dia. 41 ft.		
	with damper			
	3-1/4" x 10"	24 ft. 26 ft.		
	3-1/4" x 12" wall cap with damper	2011.		
$\bigcirc$	Round	8" Dia. 44 ft.		
	roof cap	10" Dia. 56 ft.		



### **REMOVE THE PACKAGING**

- Lift out the wooden crossmember, as well as the top protective carton.
- Lift out the four "L" shaped polystyrene protection profiles.
- Remove the protection moldings around the smaller carton box.
- Remove the small box housing the motor.
- Lift the hood out of the box.

**CAUTION:** Lift the hood by grasping the outside edges of the inlet opening of the hood. **Do not lift the hood by the exhaust opening divider damage will occur!** 



- Remove the shipping screws holding the wood mounting piece to the back side of the hood. Set aside the wood mounting piece and screws for later installation. Do not discard.
- Remove the "V" shaped carton insert.
- Remove the parts package from the "V" shaped cardboard insert.
- Remove the junction box cover and knockout.
- Install the strain relief onto the back or top of the hood.
- Remove all tape and packing material from the hood, duct transition and motor.



## **STEP 1** DETERMINE HOOD, DUCTWORK AND WIRING LOCATIONS

- Use a level to draw the cooktop centerline location. Draw the line to ceiling height.
- Measure desired distance from the bottom of the hood to the cooking surface, 30" min. to 36" max.

**Note:** If you are installing the hood with duct covers, be sure to read "Using Duct Cover Accessories" page 7. Exact installation height may be determined by use of one or more duct covers.

- Use a level to draw a straight horizontal pencil line indicating the bottom of the hood.
- From the line indicating the bottom of the hood, measure 15-3/8" up and draw another line for the location of the wood support. See illustration.

#### FOR VERTICAL (Straight Up) DUCTING:

- Use a level to draw a centerline from the bottom of the hood to ceiling or soffit.
- If venting out the ceiling, extend the centerline forward on the ceiling or soffit.
- Locate the centerline of a 10-1/2" hole on the ceiling or soffit by measuring 6" from the wall.



#### FOR DUCTING THROUGH REAR WALL:

• Measure 9-7/8" above the marked line for the top of the hood. At the centerline, mark location for a 10-1/2" diameter hole.

#### House Wiring Location:

• The junction box is fastened to the back of the hood on the right side.



- The recessed back side of the hood provides a large area for the house wiring to exit the wall and be routed to the rear knockout and junction box.
- The location for the house wiring depends on the installation height of the hood and the width of the hood.
- Remove junction box cover and knockout. Install strain relief.



#### **Alternate Knockout Locations**

If the installation requires, the junction box can be relocated from the back to the top of the hood. Remove

3 screws, align box to top knockout and secure with original screws.

• Remove junction box cover and knockout. Install strain relief.

### STEP 2A INSTALL HOOD ONTO WALL

# SKIP THIS STEP IF INSTALLING BENEATH A SOFFIT OR CABINET, GO TO STEP 2B.

- Locate at least 2 vertical studs at the wood support.
- Center the supplied wood support, left to right and below the 15-3/8" marked line.



• Secure the wood support to 2 or more vertical studs, using at least 2 of the 4 supplied long screws.

**IMPORTANT:** Screws must penetrate at least 1-1/2" into vertical studs. Countersink screws into support.



• Adjust depth of original mounting screws in the wood support until they protrude 1/4" forward. This 1/4" gap will provide clearance to hang the hood. IMPORTANT: Framing must be capable of supporting up to 150 lbs.

#### Install Transition Onto Top of Hood



- Place the transition piece over the hood exhaust and secure with 4 screws provided.
- Use duct tape to seal the connection. Check to be sure the damper moves freely.

#### Hang Hood On Wood Support

- Lift the hood and hold close to the installation location. Route house wiring through the knockout and into the junction box.
- Place the hood over the wood support. Be sure the mounting screws engage the keyhole slots in the back of the hood. Tighten the screws.

# WARNING: Continue to provide additional

support while the hood is mounted with only these 2 screws. These screws will not support the weight of the hood. The hood could fall resulting in damage or personal injury.

**AVERTISSEMENT** – Continuez à fournir un soutien additionnel pendant le montage de la hotte avec ces deux vis seulement. Ces deux vis ne soutiendront pas le poids de la hotte. La hotte peut tomber, occasionnant des blessures corporelles ou des dommages matériels.

• Check to be sure the hood is level and centered.



#### Test Duct Cover Fit

• Place duct cover(s) over the top of the hood to check for gaps. Adjust the hood up or down if necessary.

#### Install Bottom Mounting Screws

- Drill 1/8" pilot holes into the two lower mounting holes. Enlarge the holes if they did not enter studs to 3/8". Insert anchors for wall fasteners into bottom holes. Remove anchor screws and add flat washers provided. Drive screws into anchors and tighten.
- Install 4 additional screws through the back of the hood and into the wood support.

## STEP 2B Alternate Mounting Method INSTALL HOOD TO SOFFIT OR BENEATH CABINETS

# SKIP THIS STEP IF USING WALL MOUNTING METHOD

When necessary, the hood may be installed so that it is supported by the soffit.

- $\bullet$  The soffit should be constructed with 2 x 4's.
- Determine the installation location on the wall.
- Continue the centerline forward on the bottom of the cabinet or soffit.
- The opening above the hood should allow for the 10" round duct and clearance to slide the hood back against the wall.



• The 2 × 4 studs must be located as shown in the chart, Dim. A. to accept mounting screws.

	"A" Centerline to Stud and Keyhole Slots	"B" Hood Width At the Top	
ZV48T	19-9/16"	40"	
ZV48S	23-9/16"	47-15/16"	
ZV36T	13-9/16" 28"		
ZV36S	17-9/16"	35-15/16"	
ZV30T	10-9/16"	22"	
ZV30S	14-9/16"	29-15/16"	
2"	AI	Top View Front of Hood	
7-1/2"	8"	8 	
9/16" 🔶	——————————————————————————————————————		

• Drill 1/8" pilot holes into the studs at the locations shown in the top view illustration.

IMPORTANT: Soffit framing must be capable of supporting up to 150 lbs.

#### Install Transition Onto Top of Hood



- Place the transition piece over the hood exhaust and secure with 4 screws provided.
- Use duct tape to seal the connection. Check to be sure the damper moves freely.

#### Mount Hood onto Soffit or Cabinet

**Note:** If mounting to the underside of a cabinet with a recessed bottom, install shims to fill the gap.



- Drive mounting screws into the studs until they protrude 1/4". The 1/4" gap will provide clearance to engage the keyhole slots in the top of the hood.
- Lift hood to installation position. Locate house wiring and route through the knockout (from the back or top of the hood).
- Lift hood onto mounting screws. Slide back against the rear wall.
- Tighten mounting screws.

IMPORTANT: For additional support and to minimize vibration during operation, the hood must be secured to the back wall. Use wall anchors to fasten bottom back of hood to the wall.

# **STEP 3** CONNECT DUCTWORK

- Install ductwork, making connections in direction of airflow as illustrated.
- Secure joints in ductwork with sheetmetal screws.
- Wrap all duct joints with duct tape for an airtight seal.
- Use duct tape to seal the flange connection. Reach inside the hood and push the damper up to be sure it moves freely.



# **STEP 4** CONNECT ELECTRICAL

Verify that power is turned off at the source.

**WARNING:** If house wiring is not 2-wire with a ground wire, a ground must be provided by the installer. When house wiring is aluminum, be sure to use U.L. approved anti-oxidant compound and aluminum-to-copper connectors.

**AVERTISSEMENT**— Si le câblage de la maison n'est pas du type à deux fils avec un fil de terre, l'installateur doit fournir un circuit de terre. Quand les fils de la maison sont en aluminium, il prendre soin d'utiliser de la pâte antioxidation approuvée par UL et des connecteurs pour l'aluminium-cuivre.



- Use wire nuts to connect incoming ground to green, white to white and black to black.
- Push wires into junction box and replace cover. Be sure wires are not pinched.

# STEP 5 INSTALL DUCT COVERS

**Note:** For easier handling, remove cardboard insert after film is peeled off.

Remove protective film from duct covers. If more than one duct cover is used, secure each piece together with screws provided.

- Place the duct cover(s) on top of the hood.
- From inside the hood, secure the duct cover to the top with the small Phillips head screws supplied with the covers.

# **Installation Instructions**



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- Align implement rod to stand-offs with the screw hole towards the inside of the hood. Secure the rod to the stand-offs with the supplied Allen wrench.
- Follow the same procedure on the opposite side.

### FINALIZE INSTALLATION

- Install the supplied infrared bulb(s).
- See the Owner's Manual for instructions to test operation.

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

For Monogram<sup>®</sup> 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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