

# Glass Wall Mount Range Hood

PHW Model Series

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## Before You Begin...

#### Important:

- **Installer:** In the interest of safety and to minimize problems, read these installation instructions completely and carefully before you begin the installation process. Leave these installation instructions with the customer.
- **Customer:** Keep these installation instructions for future reference and the local electrical inspector's use.

## Customer Service Information

#### If You Need Help...

If you have questions or problems with installation, contact your Dacor dealer or the Dacor Customer Service Team. For repairs to Dacor appliances under warranty call the Dacor Distinctive Service line. Whenever you call, have the model and serial number of the appliance ready. The model and serial number are printed on the appliance data label (see below for location). Remove the filter(s) to view the label.

#### **Dacor Customer Service Team**

Phone: (800) 793-0093 (U.S.A. and Canada) Monday — Friday 6:00 A.M. to 5:00 P.M. Pacific Time

Web site: www.Dacor.com

#### Dacor Distinctive Service (for repairs under warranty only)

Phone: (877) 337-3226 (U.S.A. and Canada) Monday — Friday 6:00 A.M. to 4:00 P.M. Pacific Time

#### Product Data Label

- The product data label contains the model and serial number information and the electrical requirements.
- The label is located inside the hood chassis, behind the left filter as you face the front. Remove the filter to view it.

All specifications subject to change without notice. Dacor assumes no liability for changes to specifications.

## Important Safety Instructions

### Important Information About Safety Instructions

- The *Important Safety Instructions* and warnings in these instructions are not meant to cover all possible problems and conditions that can occur. Use common sense and caution when installing, maintaining or operating this or any other appliance.
- Always contact the Dacor Customer Service Team about problems and conditions that you don't understand.

Safety Symbols and Labels

#### **A** DANGER

Immediate hazards that **WILL** result in severe personal injury or death.

#### 

Hazards or unsafe practices that **COULD** result in severe personal injury or death.

#### 

Hazards or unsafe practices that **COULD** result in minor personal injury or property damage.

### A DANGER

To avoid the possibility of explosion or fire, do not store or use combustible, flammable or explosive vapors and liquids (such as gasoline) inside or in the vicinity of this or any other appliance. Also keep items that could explode, such as aerosol cans away from range or cooktop and range hood. Do not store flammable or explosive materials in adjacent cabinets or areas.

#### 

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 servicing 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.

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WARNING – TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:

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

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

d) Ducted fans must always be vented to the outdoors.

### 

For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors.

### **READ AND SAVE THESE INSTRUCTIONS**

## Important Safety Instructions

### **General Safety Precautions**

To reduce the risk of fire, electric shock, serious injury or death when using your appliance, follow basic safety precautions, including the following:

#### **WARNING**

- <u>Do not</u> install or operate this hood if it has been damaged, dropped, has damaged electrical wires or is not working properly. If the product is damaged when received, immediately contact the dealer or builder.
- The customer should not install, repair or replace any part of the range hood unless specifically recommended in the literature accompanying it. A qualified service technician should perform all other service.
- Keep all packaging materials away from children. Plastic bags can cause suffocation.
- This range hood must be installed and grounded by a qualified installer according to these installation instructions.
- Install or locate this appliance only in accordance with these installation instructions and the requirements specified by the manufacturer of the cooktop or range. Improper installation, adjustment, alteration, service or maintenance can cause serious personal injury or property damage.
- Do not use an extension cord or adapter plug with this appliance.
- When cutting or drilling into the wall or ceiling, do not damage electrical wiring and other hidden utilities.
- The installer must show the customer the location of the fuse or junction box so that the customer knows where and how to turn the power off.
- Read the use and care manual completely before using this appliance.
- Do not tamper with the controls.
- Never allow the filters to become blocked or clogged. Do not allow foreign objects, such as cigarettes or napkins, to be sucked into the hood.
- Clean the filters and all grease-laden surfaces often to prevent grease fires and maintain performance.
- If the cooktop and range hood are near a window, use an appropriate window treatment. Avoid long drapes or other window coverings that could blow over the cooktop and hood, resulting in a fire hazard.
- · Always run the blower whenever the cooktop is operating.
- Never leave the range or cooktop unattended when a burner (or element) is in use. Boil-overs and greasy spills may smoke and/or ignite.
- Do not leave children alone or unattended in the area where the cooktop and range hood are in use. Never allow children to sit or stand on an appliance. Do not let children play with a range, cooktop or range hood. Do not store items of interest to children above or around the cooktop, range or range hood.
- A minimum of two people are required to safely install this appliance. Do not attempt to lift the glass hood assembly alone.
- TO REDUCE THE RISK OF INJURY TO PERSONS IN THE EVENT OF A RANGE TOP GREASE FIRE:
  - a) SMOTHER FLAMES with a close-fitting lid, cookie sheet or metal tray, then turn off the burner. BE CAREFUL TO PREVENT BURNS. If the flames do not go out immediately, EVACUATE AND CALL THE FIRE DEPARTMENT.
  - b) NEVER PICK UP A FLAMING PAN you may be burned.
  - c) DO NOT USE WATER, including wet dish cloths or towels a violent steam explosion may result.
  - d) Use a fire extinguisher ONLY if:
    - · You have a Class ABC extinguisher, and you already know how to operate it.
    - The fire is small and contained in the area where it started.
    - The fire department is being called.
    - You can fight the fire with your back to an exit.

# Installation Specifications

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- Observe all governing codes and ordinances during planning and installation. Contact your local building department for further information.
- The minimum installed distance from the rear of blower unit base to the cooktop surface must be no less than 30" inches (76.2 cm), 26 inches (66.0 cm) for an electric cooktop. The minimum specified distance may be higher for the particular range or cooktop in use. Check the manufacturers specifications for the cooktop or range.

## Product Dimensions

Tolerances: ±1/16" (±1.6 mm), -0 unless otherwise stated



\* Glass thickness of 5/16" (3 mm) not included

\*\* Glass width must be specified at time of order. Specify glass part number: PHGXXBK where XX is the width.

## Operating Specifications

Blower	600 CFM max.		
Blower Speeds	4 with electronic speed control		
Lights	120 Vac, 50 Watt, halogen (1)		
Filters	Mesh type, dishwasher safe (2)		
Exhaust	8 inch		
Finish	430 stainless steel with tempered glass hood		
Total Connected Load	120 Vac, 60 Hz. 3.5 Amp.		
Circuit Requirement	120 Vac, 15 Amp. grounded, dedicated circuit, min.		

## Planning the Location

- Carefully check the location where the hood is to be installed. The hood should be placed for convenient access. Make certain that electrical power can be provided in the selected location.
- Plan the installation so that all minimum dimensions shown are met or exceeded. Dimensions shown provide minimum clearances, unless otherwise noted.
- All contact surfaces between the hood and any cabinets or walls must be solid and at right angles.
- Install the range hood and cooking appliance(s) so that they can be removed if service is required.



Side View

**NOTE:** The mounting hardware included with the hardware packet is suitable for mounting to brick and masonry only. If mounting the range hood to drywall, Dacor strongly recommends the using an anchoring system designed for use with drywall. In addition, Dacor strongly recommends that you install a reinforced mounting block between the studs behind all hood mounting locations.



# Installation Specifications

## **Electrical Specifications**

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The electrical service to the range hood should be installed only by a licensed electrician.

It is the owner's responsibility to ensure that the electrical connection of this appliance is performed by a qualified electrician. The electrical installation, including minimum supply wire size and grounding, must be in accordance with the National Electric code ANSI/NFPA\* (or latest revision) and local codes and ordinances.

\* A copy of this standard may be obtained from:

National Fire Protection Association

1 Batterymarch Park

Quincy, Massachusetts 02269-9101

Connect the hood to a junction box supplied by a 120 Vac, 60 Hz dedicated, grounded, 3-wire (hot, neutral, ground) circuit protected by a 15 Amp. circuit breaker or time delay fuse. It must be installed a minimum of 17 inches above the bottom of the hood.

## Planning the Duct Work

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- To reduce the risk of fire and to properly exhaust air, be sure to duct air outside the house or building. Do not vent exhaust air into spaces within walls or ceilings or into attics, crawl spaces or garages.
- To prevent combustion by-products smoke or odors from entering the home and to improve efficiency, tape all duct joints securely.
- Do not exhaust more than one vent into a single duct run.
- TO REDUCE THE RISK OF FIRE, USE ONLY METAL DUCT WORK.
- **DO NOT** install an additional in-line or external blower to increase the length of the duct run. Even small differences between blower air flow rates can greatly reduce the air draw of the hood.
- All duct work materials (including screws and duct tape) must be purchased separately by the customer.
- The hood exhaust connects to an 8-inch round duct. You can increase the duct size over the duct run if desired. To prevent a back draft, never decrease the duct size over the run. If existing duct work is smaller than 8 inches in diameter, remove it and replace it with 8-inch duct work.
- Do not rely on tape alone to seal duct joints. Fasten all connections with sheet metal screws and tape all joints with certified silver tape or duct tape. Use sheet metal screws as required to support the duct weight.
- To prevent back-drafts, a damper at the duct outlet may also be required.

- When planning new duct work, always look for the shortest, most direct route to the outside. Venting can be done through the roof or directly through the back wall to the outside as shown.
- Make sure duct work does not interfere with floor joists or wall studs.



Calculating the Maximum Duct Run Length

The maximum straight duct length for the hood is 50 feet. To determine the actual maximum duct run, subtract the equivalent length of each elbow, transition and cap from 50 feet.

EQUIVALENT LENGTHS					
Piece	Subtract	Piece	Subtract		
8" 90° elbow	7 feet	10" 90° elbow	5 feet		
8" 45° elbow	3 feet	10" 45° elbow	2 feet		
3¼" X 10" to round 90° transition	25 feet	3¼" X 10" to 8"/10" round transition	4 feet		
Roof cap	*	Wall cap with damper	*		

\* The equivalent lengths of roof and wall caps vary with model and configuration. For equivalent length, contact the manufacturer or a qualified HVAC specialist.

#### Duct Work Design Tips

- Wherever possible, reduce the number of transitions and turns to as few sharp angles as possible. Two staggered 45° angles are better than one 90°.
- Keep turns as far away from the hood exhaust as possible, and as much space between bends as possible.
- For best performance, use round duct instead of rectangular, especially when elbows are required.
- If multiple elbows are used, try to keep a minimum of 24 inches straight duct between them. Avoid "S" or "back to back" use of adjacent elbows.
- In regions where the weather gets extremely cold, use thermal breaks, such as a short section of non-metallic duct, to avoid indoor heat loss. Locate the break as close as possible to the outside pass through point.
- Do not use flexible metal duct.
- **DO NOT** use duct work that is smaller in crosssectional area than the recommended size duct (8" round).

#### A WARNING

- Do not install the range hood unless the power supply provided meets the required *Electrical Specifications* (see page 4).
- Observe all governing codes and ordinances during installation. Contact your local building department for further information.
- A qualified technician must complete the installation of this built-in appliance. The owner is responsible to make sure the hood is properly installed.
- To avoid an electric shock hazard and property damage, locate electric wires and water pipes and avoid drilling or cutting in the vicinity.

## Verify the Package Contents

Unpack the box and verify that all parts listed have been provided. If any item is missing or damaged, please contact the dealer immediately. Do not install a damaged or incomplete appliance. Make sure you have everything required for proper installation before proceeding.



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G

Chimney assembly Top: PN 101957 Bottom: PN 101955)

Hood assembly with filters

- C Chimney mounting bracket \*
  - Blower assembly mounting bracket\*
- E Tempered glass hood\*\*
  - Mounting and assembly hardware
  - Mounting hardware template
  - Product literature

\* Replacement kit (PN 101963) includes both chimney and blower mounting bracket.

\*\* Order the correct size (see page 3).









## Installing the Chimney Mounting Bracket

- Determine the vertical center line for the range hood. The center line for the hood is usually the same as the center line of the range or cooktop.
- 2. Using a pencil, mark the vertical center line on the wall from where the bottom of hood will be located to where the top of the chimney will be located.
- Draw a horizontal line 9 inches long at 90° to the vertical center line where the bottom of the hood will be located. The minimum allowable distance is 30" above the cooktop.
- 4. Locate the chimney mounting bracket and position it against the ceiling as shown. Center it on the vertical center line drawn on the wall.



- 5. Mark the ceiling in two places through the holes in the top of the bracket. Remove the bracket from the ceiling.
- 6. Drill 5/16" holes through the two spots marked on the ceiling.
- 7. Insert the two of the provided wall anchors into the holes on the ceiling.
- 8. Place the chimney mounting bracket against the ceiling and attach it using two included 1 1/2" screws.

### Installing the Blower Mounting Bracket

- 1. Find the mounting bracket template in the shipping box. Put the template against the wall and line up the horizontal line drawn on the wall with the horizontal line on the template.
- 2. Line up the vertical line drawn on the wall with the center line on the template. Iron out all creases and folds and tape the template to the wall using tape that will not damage the wall finish.
- 3. Using a sharp object, mark the wall through the template at the center of the three blower mounting bracket hole positions (near the top) and the position of the two "L" brackets, near the bottom.



#### Mounting to Drywall or Plaster

- 4. Remove the template.
- 5. Drill the mounting holes.

If mounting the hood to drywall:

 Drill five appropriate sized holes for the mounting hardware being used (mounting hardware for attachment to drywall or plaster not provided). The drywall mounting hardware must be purchased separately.

If mounting the hood to brick or masonry:

- Drill five 5/16" X 1 1/2" holes in the locations marked.
- Insert five of the provided wall anchors into the five holes. The anchors provided are for attaching the hood to masonry or brick only.



Mounting to Brick or Masonry

6. Attach the blower assembly mounting bracket and the "L" brackets securely to the wall (5 places).

### Installing the Duct Work

#### **IMPORTANT** - The installed duct work must:

- Be centered on the vertical center line drawn on the
  wall.
- Fit flush into the half circle on the chimney mounting • bracket, if the duct work is to enter the chimney through the ceiling rather than through the back wall).
- Extend down as far as the top of the blower assembly mounting bracket.



**Duct Work Installation** 

### Hanging the Blower Assembly

### **WARNING**

Do not use screws to attach the duct work to the hood exhaust outlet. Use duct tape only. Screws may prevent the damper flaps on the top of the hood from opening.

 Inside the exhaust outlet on the top of the blower assembly, there are metal or plastic damper flaps. The flaps close to help prevent back-drafts when the blower is turned off. Remove the shipping tape and make sure the flaps open and close freely before proceeding.



2. Lift the blower assembly up and put the mounting hole on the top over the mounting bracket, while inserting the exhaust outlet into the end of the duct system. Gently lower the blower assembly onto the lip of the mounting bracket. Slide the bottom part of the blower assembly between the two "L" brackets.



- Insert two provided machine screws into the two holes above the mounting bracket on the blower assembly and tighten into place.
- 4. Insert two machine screws through the front of the mounting bracket and tighten into place.
- 5. Insert two machine screws through the side of both "L" brackets and tighten into place.



6. Attach the end of the duct system to the exhaust outlet with duct tape.

### **Electrical Connection**

#### A WARNING

- To avoid electrical shock or fire hazard, make sure the power supply at the fuse or junction box is turned off before proceeding with final installation.
- Improper connection of the hood electrical wiring may create an electric shock or fire hazard and may result in damage to the hoods electrical system.
- Do not ground the hood to the neutral (white) power supply wire. Connect the hood ground wire to a separate, properly grounded wire installed by a licensed electrician.

Connect the power supply wires to the wires coming out of the top of the hood junction box on the blower assembly:

- 1. Connect the white wire from the hood to the neutral (white) power supply wire.
- 2. Connect the black wire from the hood to the hot (black) power supply wire.
- 3. Connect the green and yellow wire from the hood to the house ground (green) wire from the junction box.



## Installing the Chimney

**IMPORTANT:** Be careful not to pinch the electrical wires while installing the chimney.

- 1. Remove the protective plastic covering from both pieces of the chimney assembly. Do not remove the protective tape strips from the inside of the chimney. They protect the telescoping pieces from scratching during installation.
- 2. Carefully slide both sections together so that only the vents on the top section show.
- 3. Hold the chimney vertically with the vents up, close to the blower assembly.
- 4. Connect the control panel cable on the chimney to the cable on the front of the blower assembly.



Continued...

## Installing the Chimney (Cont.)

- 5. Carefully put the chimney over the blower assembly, taking care not to scratch the surfaces. Make sure the wiring is tucked in behind the chimney.
- 6. Lock the tabs inside the chimney bottom into the slots on the bottom of the blower assembly.



- 7. Slide the top of the chimney up toward the ceiling. Line up the holes on the side of the chimney, near the vents, with the holes on the side of the chimney mounting bracket.
- 8. Attach the top of the chimney to the mounting bracket using two sheet metal screws, one on each side.



## Installing the Glass Hood

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Attaching the glass range hood requires two people. Do not attempt to lift the hood without assistance.

- 1. Locate the hood mounting hardware. It consists of:
  - 4 thumb screws
  - 4 plastic washers
  - 4 plastic spacers
- 2. For easier hood installation, assemble all the thumb screw hardware before lifting the hood into position.
  - · Hold each thumb screw with the threads up.
  - Put the plastic washer on the thumb screw.
  - Put the plastic spacer over the end.
- 3. Lift the glass hood into place. Line up the holes on the glass with the mounting holes on the bottom of the blower assembly.
- 4. Insert all four thumb screws into the bottom of the glass and tighten into place.



## Verifying Proper Operation

- 1. Turn on power at the junction or fuse box.
- 2. If the control panel is not lit, turn on the main power switch located next to the light fixture on the underside of the hood.
- 3. Touch the light key. Verify that all the lights come on.
- 4. Touch the light key again to turn the lights off.
- 5. Touch the blower "+" key once and release. Verify that one light is showing on the blower speed indicator and that the blower is on at low speed.
- 6. Touch and release the blower "+" repeatedly, three times. Verify that with each touch of the key the number of lights on the blower speed indicator increases and that the blower speed increases.
- 7. Touch and hold the blower "-" key until the blower turns off.

#### If the hood fails to operate properly:

- · Verify that power is supplied to the hood.
- Check the electrical connections to ensure that the installation has been completed correctly.
- Repeat the above test.
- If the hood still does not work, contact Dacor Distinctive Service at (877) 337-3226. Do not attempt to repair the appliance yourself. If you need service, be sure to have the model and serial numbers available when you call. See the inside cover for location.

Do not attempt to repair the appliance yourself. Dacor is not responsible for the cost of correcting problems caused by a faulty installation.

## Installation Checklist

#### A WARNING

- To ensure a safe and proper installation, the following checklist should be completed by the installer to ensure that no part of the installation has been overlooked.
- Proper installation is the responsibility of the homeowner. The importance of proper installation of your Dacor range hood cannot be overemphasized.
- □ Is the blower assembly mounting bracket properly attached to the wall according to the instructions starting on page 6?
- □ Is the blower assembly tightly secured to the mounting bracket with the machine screws (see page 8)?
- □ Is the duct work completely installed? Are all joints attached with sheet metal screws and wrapped with duct tape (see pages 4 and 7)?
- □ Is the range hood wired and grounded according to these instructions and in accordance with all applicable electrical codes (see pages 4 and 9)?
- □ Is the tempered glass hood attached to the blower assembly as specified in this manual (see page 10)?
- Are the filters properly installed according to the use and care manual?
- □ Has proper operation been verified?
- □ Has the warranty been activated on-line or the warranty card filled out completely and mailed?

# Notes

