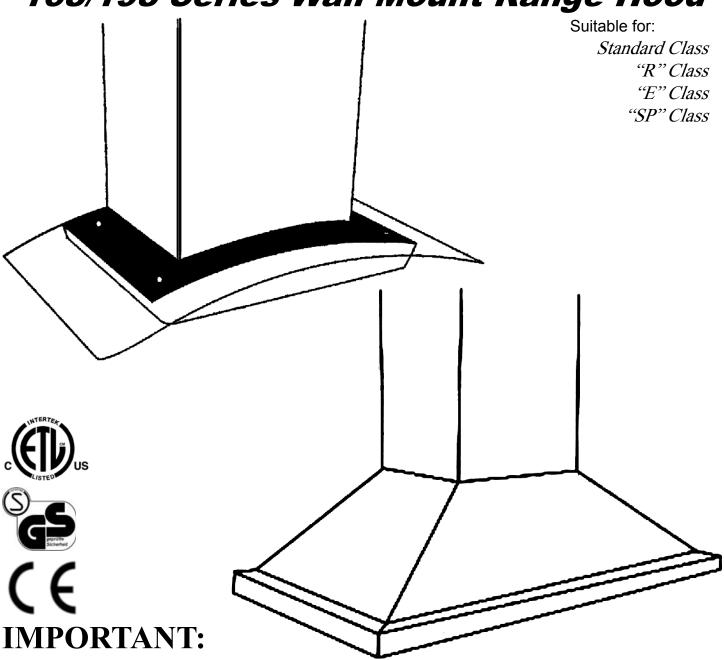
Installation Guide and Users Manual

168/198 Series Wall Mount Range Hood



Read and save these instructions.

NOTICE:

Installer: Leave this guide with the homeowner **Homeowner:** Keep this guide for future reference

Wall Mount Range Hood

Important Safety Notice

Read all Instructions before Installing and operating this appliance

- The installation in this manual is intended for qualified installers, service technicians or persons with similar qualified background. Installation and electrical wiring must be done by qualified professionals and in accordance with all applicable codes and standards, including fire-rated construction.
- <u>DO NOT</u> attempt to install this appliance yourself. Injury could result from installing the unit due to lack of appropriate electrical and technical background.
- Range hood may have very sharp edges; please wear protective gloves if it is necessary to remove any parts for installing, cleaning or servicing.
- Activating any switch ON before completing installation may cause ignition or an explosion.
- Due to the size and weight of this range hood, two people installation is recommended.

To reduce the risk of fire, electric shock, or injury to persons:

- For general ventilating use only. <u>DO NOT</u> use to exhaust hazardous or explosive materials and vapors.
- The combustion air flow needed for safe operation of fuel-burning equipment may be affected by this unit's operation. 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 of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), and the local code authorities.
- Before servicing or cleaning unit, switch power OFF at service panel and lock service panel to prevent power from being switched ON accidentally.
- Clean grease laden surfaces frequently. To reduce the risk of fire and to disperse air properly, make sure to vent air outside. <u>DO NOT</u> vent exhaust into spaces between walls, crawl spaces, ceiling, attics or garages.
- Ducted fans MUST always be vented to the outdoors.
- Use only metal ductwork and this unit MUST be grounded.
- Sufficient air is needed for proper combustion and exhausting of gases through the duct to prevent back drafting.
- When cutting or drilling into wall or ceiling, be careful not to damage electrical wiring or other hidden utilities.
- All electrical wiring must be properly installed, insulated and grounded.
- Old duct work should be cleaned or replaced if necessary to avoid the possibility of a grease fire.
- Check all joints on duct work to insure proper connection and all joints should be properly taped.
- Use this unit only in the manner intended by the manufacturer. If you have questions, contact the vendor.

To reduce the risk of a stove top grease fire:

- Keep all fan, baffle, spaces, filter, grease tunnel, oil container and grease-laden surfaces clean. Grease should not be allowed to accumulate on fan, baffle, spaces, filter, grease tunnel and oil container.
- Always turn range hood ON when cooking at high heat or when cooking flaming foods.
- Use high settings on cooking range only when necessary.
- Never leave surface units unattended at high settings. Boil overs cause smoking and greasy spillovers that may ignite. Heat oils slowly on low or medium settings.

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Important Safety Notice

Read all Instructions before Installing and operating this appliance

- Clean ventilating fan frequently.
- Always use appropriate cookware and utensils size.
- Always use cookware appropriate for the size of the surface element.

To reduce the risk of injury to persons in the event of a stove top grease fire:

- SMOTHER FLAMES with a close-fitting lid, cookie sheet, or metal tray, then turn OFF the burner. BECAREFUL TO PREVENT BURNS. NEVER PICK UP A FLAMING PAN—you may be burned. KEEP FLAMMABLE OR COMBUSTIBLE MATERIAL AWAY FROM FLAMES. If the flames DO NOT go out immediately, EVACUATE AND CALL THE FIRE DEPARTMENT or dial your local emergency service immediately.
- DO NOT USE WATER, including wet dishcloths or towels a violent steam explosion will result.
- Use an extinguisher ONLY if:
 - You know you have a Class A, B, C extinguisher, and you already know how to operate it.
 - The fire is small and contained in the area where it is started.
 - The fire department is being called.
 - You can fight the fire with your back to an exit.

To reduce the risk of injury to persons in the event of a gas leaks:

- Extinguish any open flame.
- DO NOT turn on the range hood fan or any type of ventilator.
- DO NOT turn on the lights or any type of appliance.
- Open all doors and windows to disperse the gas. If you still smell gas, call the gas company and fire department, or dial your local emergency service immediately.

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

AWARNING

This is the safety alert symbol. This symbol alerts you to potential hazards that can hurt you and others. All safety messages will follow the safety alert symbol and the word "WARNING".

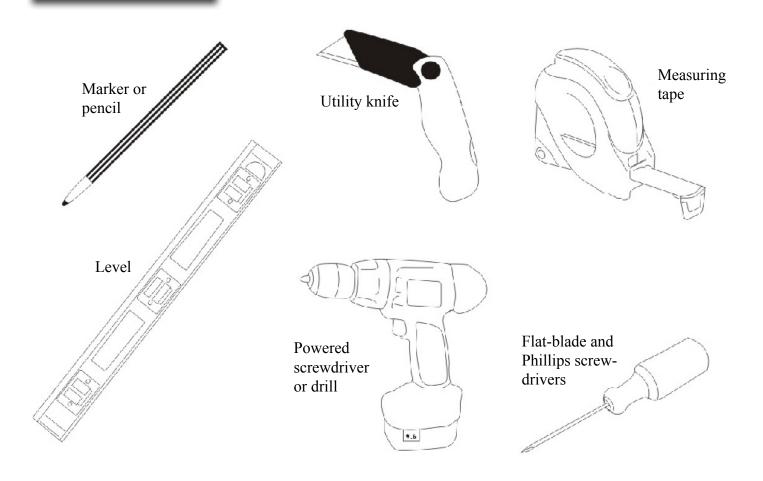
The manufacturer and/or distributor/reseller declines all responsibility in the event of failure to observe the instructions given here for installation, maintenance and suitable use of the product. The manufacturer and/or distributor/reseller further declines all responsibility for injury due to negligence and the warranty of the unit automatically expires due to improper maintenance. The manufacturer and/or distributor/reseller will not be held responsible for any damages to personal property or real estate or any bodily injuries whether caused directly or indirectly by the range hood.

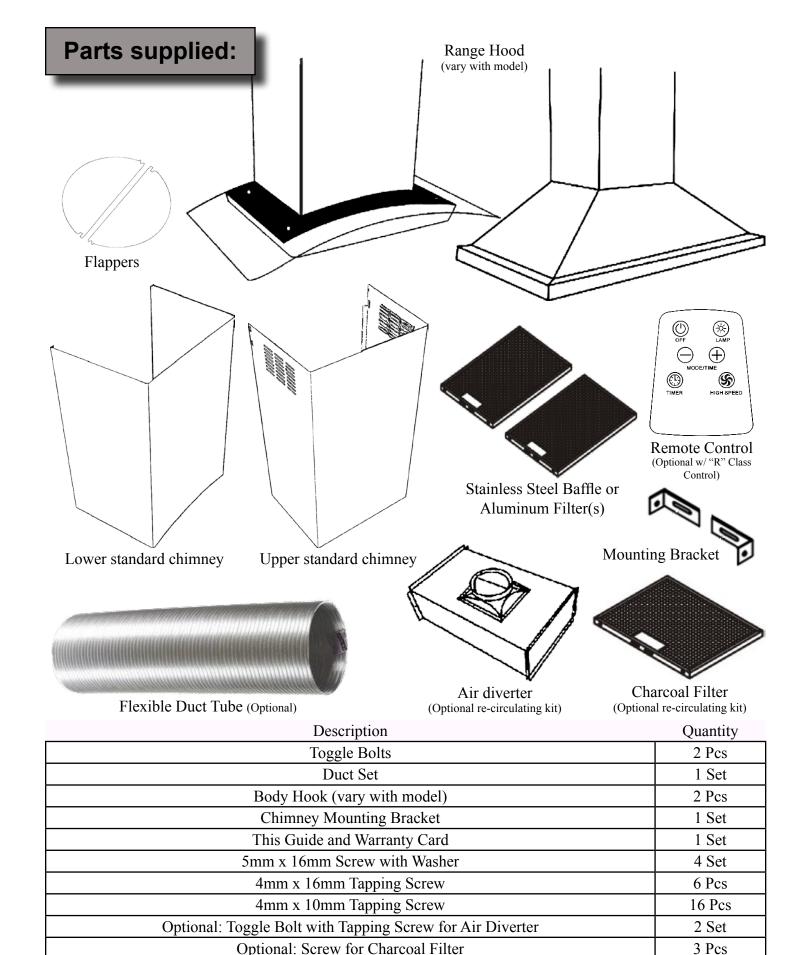
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Tools needed:





Optional: Screw for Charcoal Filter

Venting Requirements

Height & Clearance

Mounting

- Vent system must terminate to the outside (roof or side wall).
- DO NOT terminate the vent system in an at- 110" at 31" bood mounting tic or other enclosed area. height above countertop/sto
- DO NOT use 4" (10.2 cm) laundry-type wall (may vary with different caps. model). Chimney extensi
- Use metal/aluminum vent only. Rigid metal/aluminum vent is recommended.
- DO NOT use plastic vent.
- Always keep the duct clean to ensure proper airflow.
- Calculate the following figures before installation:
 - 1. Distance from the floor to the ceiling.
 - 2. Distance between the floor to the countertop/stove (recommend* 28" to 31").
 - 3. Distance between the countertop/stove to the range hood.
 - 4. Height of hood and duct cover.

For the most efficient & quiet operation:

- A distance of 28" to 31" is recommended* between stove top and the bottom of range hood.
- It is recommended that the range hood be vented vertically through the roof through 6" (15.2 cm) or bigger round metal/aluminum vent work.
- The size of the vent should be uniform.
- Use no more than three 90° elbows.
- Make sure there is a minimum of 24" (61 cm) of straight vent between the elbows if more than one elbow is used.
- DO NOT install two elbows together.
- The length of vent system and number of elbows should be kept to a minimum to provide efficient performance.
- The vent system must have a damper. If roof or wall cap has a damper, DO NOT use damper (if supplied) on top of the range hood
- Use silver tape or duct tape to seal all joints in the vent system.
- Use caulking to seal exterior wall or roof opening around the cap.

Maximum* deiling clearance Bracket Standard height above countertop/stove Upper Chimney model). Chimney extensions Extension available* available for higher ceiling. Standard Lower Chimney Extension available* Range hood Min: 28" Max: 31" Max*: 110" Countertop/Stove 36" base * Higher ceiling requires chimney extension. Available at your local resellers.

^{*} Due to different ceiling height configurations, recommended height may not be applicable.

IMPORTANT:

- A minimum of 6" round (standard for this range hood) or 3-1/4 x 10" rectangular duct (purchased separately) must be used to maintain maximum airflow efficiency.
- Flexible 6" round duct provided for convenience, always use rigid type metal/aluminum ducts if available to maximize airflow when connecting to provided duct.
- Please use *Duct Run Calculation* below to compute the total available duct run when using elbows, transitions
- ALWAYS, when possible, reduce the number or transitions and turns. If long duct run is required, increase duct size from 6" to 7" or 8". If a reducer is used, install a long reducer instead of a pancake reducer. Reducing duct size will restrict airflow and decrease airflow, thus reduce duct size as far away from opening as possible.
- If turns or transitions are required: Install as far away from opening and as far apart, between 2, as possible.
- Minimum mount height between stove top to hood bottom should be no less than 28-inch*.
- Maximum mount height between stove top to hood bottom should be no higher than 31-inch*.
- It is important to install the hood at the proper mounting height. Hoods mounted too low could result in heat damage and fire hazard; while hoods mounted too high will be hard to reach and will loose its performance and efficiency.
- If available, also refer to stove top manufacturer's height clearance requirements and recommended hood mounting height above range.
 - * Due to different ceiling height configurations, recommended height may not be applicable.

Minimum Duct Size:

- Round 6" minimum
- Rectangular 3-1/4 x 10" minimum (requires a 6" to 3-1/4x10" adaptor, not supplied)

Calculating Vent System Length

To calculate the length of the system you need, deduct the equivalent feet for each vent piece used in the system from the recommended maximum duct run.

Duct Run Calculation:				
Recommended maximum run				
6" or 3-1/4 x 10" duct	50 ft			
Vent piece deduction				
Each 90° elbow used	9 ft			
Each 45° elbow used	5 ft			
Each 6" to 3/14 x 10" transition used	7 ft			
Side wall cap with damper	0 ft			
Roof cap	0 ft			

Duct Run Calcuation example:

$$0ft + 9ft + 9ft + 5ft = 23ft$$
 used

One roof cap, two 90° elbow, and one 45° elbow used: $0ft + 9ft + 9ft + 5ft = \underline{23ft}$ used.

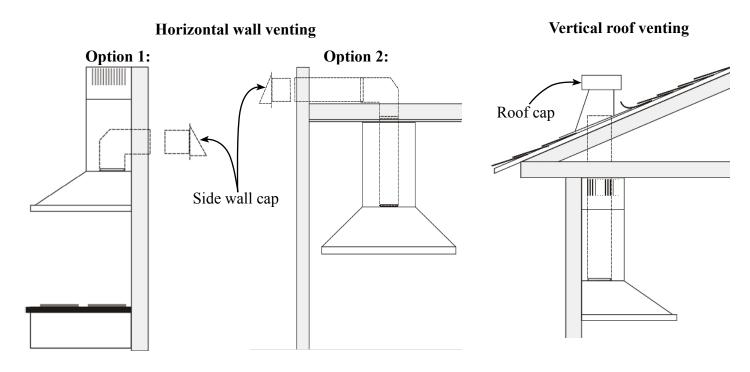
Deduct 23ft from 50ft, $\underline{27ft}$ maximum available for straight duct run.

Venting Methods

- This range hood is factory set for venting through the roof or wall. For non-vented (re-circulating) installations, see *Recirculating (Non-Vented) Kit* on Page 11.
- Vent work can terminate either through the roof or wall. To vent through a wall, a 90° elbow is needed.

IMPORTANT:

- NEVER exhaust air or terminate duct work into spaces between walls, crawl spaces, ceiling, attics or garages. All exhaust must be ducted to the outside.
- Use metal/aluminum duct work only.
- Fasten all connections with sheet metal screws and tape all joints with certified Silver Tape or Duct Tape.
- Use caulking to seal exterior wall or roof opening around the cap.



Ductless Conversion

- Ductless conversion is intended for applications where an exhaust duct work is not possible to be installed. When converted, the hood functions as a purifying hood rather than an exhaust hood. Fumes and exhaust from cooking is drawn and filtered by a set of charcoal filters. The air is then purified and re-circulated back within the home.
- We recommend to ALWAYS exhaust air outside of the home by employing existing or installing new duct work, if possible. Only when the exhaust option is not possible should you recourse to converting the hood into a purifying unit.
- When converted to be a "purifying" unit, a set of charcoal filters and an air-diverter are required in addition to its standard aluminum filter set. Available at your local resellers. The standard aluminum filters are intended to capture residue from cooking, the optional charcoal filters help to purify fumes exhausted from cooking, and the optional air-diverter redirects filtered clean air back to the house.

Charcoal Filter Installation

NOTE: The charcoal filters are preinstalled if you purchased the range hood with re-circulating kit from us.

- 1. Remove aluminum filters on hood.
- 2. Remove the safety filter under the aluminum filter by unscrewing two screws, then position the charcoal filter and align the screw holes, reinstall and fasten two screws.
- 3. Reinstall the aluminum filters back to the hood.
- 4. Charcoal filters must be replaced after 120 hours of use (or approximately every 2 to 3 months based on the average of 1 to 2 hours of daily cooking time). Available at your local reseller.

Electrical Requirements

IMPORTANT: Observe all governing codes and ordinances.

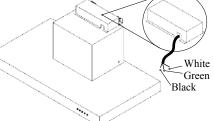
(Please consult with a qualified electrician for 220-Volt 50 Hz voltage)

It is the customer's responsibility:

To contact a qualified electrical installer.

To assure that the electrical installation is adequate and in conformance with 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.

- If codes permit and a separate ground wire is used, it is recommended that a qualified electrician determine that the ground path is adequate.
- A 120-volt, 60 Hz, AC-only, fused electrical supply is required on a separate 15-amp circuit, fused on both sides of the line.
- Do not ground to a gas pipe.
- Do not have a fuse in the neutral or ground circuit.
- RISK OF ELECTRICAL SHOCK. This range hood must be properly grounded. Check with a qualified electrician if you are not sure whether the range hood is properly grounded.
- The range hood should be connected directly to the fused disconnect (or circuit breaker) box through flexible armored or non-metallic sheathed copper cable. A U.L. or C.S.A. listed strain relief must be provided at each end of the power supply cable. Do not use extension cord or adapter plug with this appliance.
- The range hood must be connected with copper wire/plug only.
- Always use plug provided. If not possible, connect three wires according to its color (black to hot, white to neutral, and green to ground) to house wires and cap with wire connectors:





Wire sizes (copper wire only) and connections must conform with the rating of the appliance as specified on the model/serial rating label. Wire sizes 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 C22. 2 No. 0-M91 - latest edition** and all local codes and ordinances. A U.L. - or C.S.A. - listed conduit connector must be provided at each end of the power supply cable (at the range hood and at the junction box).

Copies of the standards listed may be obtained from:

Preparation

Advanced Preparations:

- 1. Read the entire installation guide and users manual thoroughly, understand instructions and warnings.
- 2. Be familiar with the controls of the range hood by reading through *Range Hood Operations*, Page 13.
- 3. Place the range hood on a flat, stable surface. Connect the range hood to a designated standard outlet (please refer the product label for the suitable voltage of this unit) and verify no debris has entered the vent openings, then turn on the range hood. Verify all operations of the range hood by referring to *Range Hood Operations*, Page 13.
- 4. Place all supplied parts and required hardware on a flat, stable surface and verify the existence of all supplied parts listed on Page 4.
- 5. Carefully remove the white plastic protective coat from the chimney covers and range hood if any.

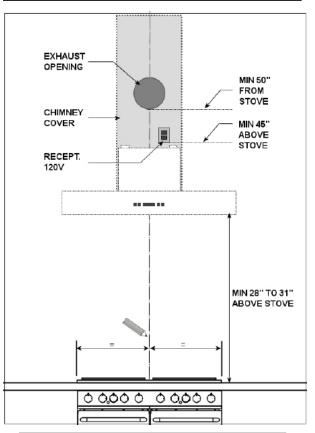
Preparations:

NOTE: To avoid damage to your hood, prevent debris from entering the vent opening.

- 1. Determine and mark the center line on the ceiling where the range hood will be installed. Make sure there is proper clearance within the ceiling or wall for exhaust vent.
- 2. Due to the weight and size of this unit, please make sure that the support system or framework being used is stable and secure in the ceiling.
- 3. Put a thick, protective covering over counter top, cook top or range to protect from damage or dirt. Remove any hazardous objects around the area when installing.
- 4. Mark the locations of the support mounting bracket holes, vent cutout (if used) and power supply cable cutout on the ceiling. Use drill and saber saw or keyhole saw to cut openings for power supply cable and vent (see *Venting Methods* and *Electrical requirements*, Pages 7-8).
- 5. If venting to the outside install vent system (see *Venting Methods*, Page 7). Use caulking to seal exterior wall or roof openings.
- 6. Disconnect main electrical supply, prepare and run electrical wiring through ceiling. Leave approximately 12" of electrical cord hanging from the ceiling. Do not restore power until wiring is completed.
- 7. Disconnect power cord, remove the aluminum grease filters or stainless steel baffle filter..
- 8. Set aside the filters until the range hood is properly installed.
- 9. If the range hood comes with a glass canopy and has not already been mounted to the hood, loosen the four canopy screws and washers from the hood top, carefully place the canopy on the hood top, and loosely tighten the four canopy screws along with washers. DO NOT put excessive pressure against the glass.



Require three or more person to move and install this range hood. Spinal or other bodily injuries could occur if it is not followed.





Hood may have very shape edges. Please wear protective gloves if it is necessary to remove any parts for installing, cleaning or servicing.

Installation



DO NOT INSTALL THE RANGE HOOD BEFORE TESTING IT. MECHAN-ICAL DAMAGE MIGHT HAVE OCCURRED DURING TRANSPORTION. Plug in the range hood to the USA/Canada 120V standard outlet (220V for Europe and other countries), test the blower and the lights before installing it.

Installations (refer to Page 4 for parts):

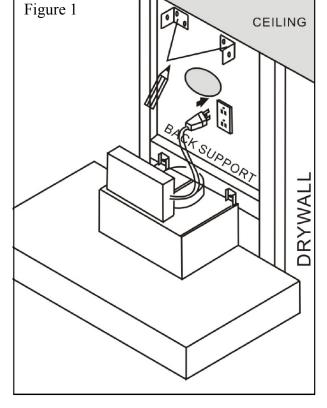
Measure the distance between stove top and the bottom of range hood. A distance of 28" to 31" is recommended*.

*Due to different ceiling height configurations, recommended height may not be applicable.

- 1. Using references in *Height & Clearance* on Page 5, mark the leveling point of the hood. Position two mounting screws on the wall, leaving 1/8" space away from the wall.
- 2. Measure the width of the chimney then attach the chimney-mounting brackets to the wall as high as you want the upper chimney to be.

NOTE: Use threaded drywall anchors only when mounting the hood on sheet rock. Mounting the hood on wall study or lumbars is highly recommended.

- 3. Align hood-mounting holes to the screws on the wall and hook the hood into place. Tighten screws to secure hood to the wall. **CAUTION: Make certain the range hood is secure before releasing!**
- 4. Connect the venting duct between the hood and the exhaust opening either on the ceiling or wall. Use silver tape or duct tape to make all joints secure and air tight.



5. Connect the range hood to a designated standard outlet (please refer the product label for the suitable voltage of this unit) or cut off the plug and connect three wires (black, white and green) to house wires and cap with wire connectors. Connect according to colors (i.e. black to black, white to white, and green to green).

SAFETY WARNING: Risk of electrical shock. This range hood must be properly grounded. Make sure this is done by qualified electrician in accordance with all applicable national and local electrical codes. Before connecting wires, switch power off at service panel and lock service panel to prevent power from being switched on accidentally.