## Vent A Hood

## Read and Save These Instructions All Hoods Must Be Installed By A Qualified Installer

# INSTALLATION INSTRUCTIONS UNDER CABINET HOOD

Read All Instructions Thoroughly Before Beginning Installation

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. Switch power off at service panel and lock the service disconnecting means to prevent power from being switched on accidentally during installation.
- B. When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
- C. Ducted fans must always be vented to the outdoors.
- D. 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 local code authorities.
- E. ASHRAE residential ventilation standard 62.2 limits exhaust fans (total) to a maximum of 15 CFM per 100 square feet of occupiable space, unless a back drafting test is performed or make-up air is provided. Consult a local HVAC engineer for make-up air evaluation.

WARNING - TO REDUCE THE RISK OF FIRE, USE ONLY METAL DUCTWORK





## General Requirements

- Observe local codes regarding special duct requirements and placement of duct against combustibles.
- Using Vent-A-Hood transitions (back page) will ensure proper efficiency.
- Using Vent-A-Hood roof jacks or wall louvers (back page) will ensure proper efficiency.
- Where possible, seal joints with duct tape.
- The hood must be ducted to the outdoors without restrictions.

### **Blower Requirements**

• The single blower unit (B100) requires 6" round duct or equivalent (28 square inches), and the dual blower unit (B200) requires 8" round duct or equivalent (50 square inches).

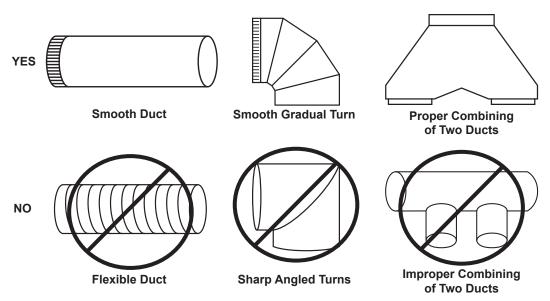
Blower	Combined Duct Dize	Sq. Inch Area	Vent-A-Hood Transition		
Single (B100)	6" round or equivalent	28 sq. in.	N/A		
Dual (B200)	8" round or equivalent	50 sq. in.	N/A		
Single and Dual (B100 & B200)	10" round or equivalent	79 sq. in.	VP562 (Optional)		
Two Duals (Two B200s)	12" round or equivalent	113 sq. in.	VP563 (Optional)		

## **Ducting Requirements**

- NEVER reduce the duct size.
- When combining ducts together, the square inch area must reflect the total square inch area of the ducts being combined.
- Do not use flexible or corrugated duct. This type of duct will restrict airflow and reduce performance.
- Only use smooth, galvanized, metal duct.
- Make the duct run as short and as straight as possible with as few turns as possible.
- Avoid sharp-angled turns. Instead, use smooth, gradual turns such as adjustable elbows or 45 degree angled turns.
- For duct runs over 20 feet, increase the duct diameter by one inch for every ten feet of duct.
- A 90 degree elbow is equal to 5 feet of duct.

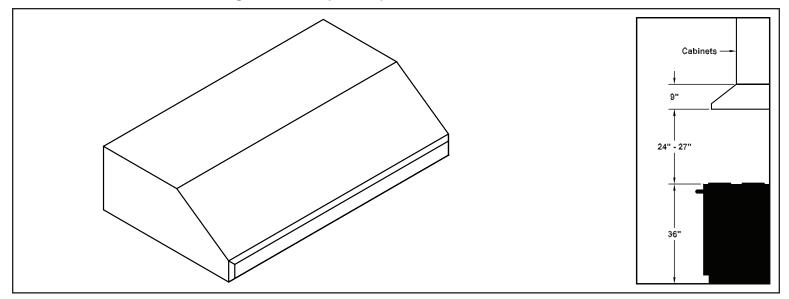
#### **Termination Requirements**

- Airflow must not be restricted at the end of the duct run.
- A wall louver or roof jack is required for each duct run.
- Every wall louver or roof jack must include a gravity damper to prevent back drafts.
- Do not use screen wire or spring-loaded doors on wall louvers or roof jacks.
- Do not terminate venting into an attic or chimney.





- 1) Read all instructions thoroughly before beginning installation. Note: These instructions apply to standard hoods only. Custom hoods may require additional specification consideration.
- 2) When installing a 9" tall under cabinet hood, it is recommended that the bottom edge of the hood be located no more than 24" 27" above the cooking surface for optimum performance.



- 3) Inspect the underside of the cabinet for a flush mounting surface. If the underside is recessed, install wood strips to provide a flush surface for the hood mounting screws to engage.
- 4) Cut hole(s) in the bottom of the cabinet to allow for duct(s) and electrical to pass through. Consult the connection diagrams (on next page) for further details on exhaust outlet and electrical placement.
- 5) IF THE HOOD IS TO BE "BACK VENTED", PROCEED DIRECTLY TO STEP 6.

Install the duct(s) from the outside of the home down to the location of the exhaust outlet(s) on the top of the hood allowing room for the transition (if applicable). If a transition is used, install duct down to the location of the transition outlet plus 1". This will allow the transition to engage 1" inside of duct. Consult the connection diagrams (on next page) for further details on exhaust outlet placement.

Use duct tape to seal all joints. A complete listing of available Vent-A-Hood ducting materials is provided on the back page of this instruction sheet.

Transition heights are as follows:

Single Blower (B100): 6" round duct will connect directly to the top of the liner.

Dual Blower (B200): 8" round duct will connect directly to the top of the liner.

Single and Dual Blower (B100 & B200): 6" round duct will connect directly to the top of the hood; 8" round will

connect directly to the top of the hood. Optional 10" round combination

transition (VP562, sold separately) is 17 1/2" tall.

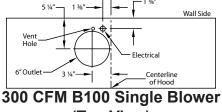
Two Dual Blowers (Two B200s): Two 8" rounds connect directly to the top of the hood. Optional 12" round

combination transition (VP563, sold separately) is 16 1/2" tall.



## **Installation Details Continued**

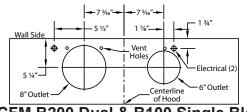
Connection Diagrams (30"- 48" Widths)



(Top View)

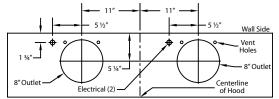
600 CFM B200 Dual Blower (Top View)

## Connection Diagram (42"- 48" Widths)



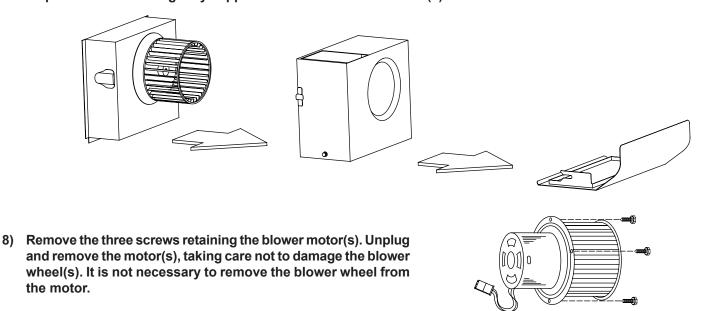
900 CFM B200 Dual & B100 Single Blower (Top View)

## **Connection Diagram (48" Width)**



1200 CFM Double B200 Dual Blowers (Top View)

- 6) Remove the hood from its packaging and place the back of the hood on the floor or countertop in front of the cabinet where it will hang.
- 7) Remove the shipping tape that is securing the E-Z Clean shield(s) inside the hood. Remove the E-Z Clean shield(s) by lightly pulling it toward the front of the hood. Gently close the back draft damper(s) from the top side of the hood. To remove the blower housing(s), unsnap the suitcase latches (one on each side of the housing). The housing(s) should be pulled forward and gently "tipped" to clear the blower wheel(s) and then out of the hood.



Warning: Make sure power is off and locked at the service disconnecting means on the service panel during installation.



## **Installation Details Continued**

9) Install an appropriate 1/2" UL listed electrical wire clamp through each motor box electrical opening on top of the hood. Install electrical wiring from the service panel to the hood location for each motor box. Consult the connection diagrams (on previous page) for further details on electrical placement.

Model	Volts	Amps*	Hz	RPM	CFM SP@0.0"	Equivalent CFM*	CFM SP@0.1"	CFM SP@0.2"	CFM SP@0.3"	Minimum Round Duct Size	Sones#
B100 Single	115	2.5	60	1550	300	450	273	245	225	6" (28 in. <sup>2</sup> )	5.4
B200 Dual	115	4.0	60	1550	600	900	531	480	430	8" (50 in. <sup>2</sup> )	6.5
B200 Dual & B100 Single	115	6.0	60	1550	900	1350	804	725	655	VP562: 10" (79 in.2)	6.3
Two B200 Duals	115	7.5	60	1550	1200	1800	1062	960	860	VP563: 12" (113 in.2)	6.6

Add 2.5 amps for each warming light.

- 10) Insert the electrical wire from the service panel into the electrical wire clamp on each motor box. Tighten the wire clamp(s).
- 11) FOR BACK VENTING APPLICATIONS ONLY. IF NOT BACK VENTING, SKIP STEP 12. PROCEED DIRECTLY TO **STEP 13.**

Note: Wall stude may interfere with back venting installations. Additional framing may be required. It is necessary to cut duct access hole(s) in the wall prior to installing the hood.

To accomplish this, place the appropriate elbow(s) on the bottom of the cabinet in line with the duct hole(s) cut in Step 4. On the wall, trace around the elbow(s). Be sure to account for the wood thickness of the bottom of the cabinet when tracing duct access holes. Remove the elbow(s) from the cabinet. Cut around the outside of the traced line(s), avoiding wall studs. Install the duct from the outside of the home to the opening in the wall. Use duct tape to seal joints.

- 12) Pull the electrical wire slack into the cabinet while raising the hood into position. Using the four screws provided, attach the hood to the bottom of the cabinet. Place the appropriate elbow(s) on the top of the hood. Elbow(s) should be placed with the non-crimped end(s) on the inside the collar(s) of the exhaust outlet(s). Use duct tape to seal all joints. Retract the electrical wire slack into the wall cavity or attic space. SKIP STEPS 13 AND 14. PROCEED DIRECTLY TO **STEP 15.**
- 13) FOR DIRECT DUCT CONNECTIONS ONLY. IF USING TRANSITIONS PROCEED DIRECTLY TO STEP 14. Pull the electrical wire slack into the cabinet while raising the hood into position and aligning the duct(s). The duct(s) should connect together as the hood is located in place. Note: The duct work must fit inside the exhaust collar(s). Using the four screws provided, attach the hood to the bottom of the cabinet. Use duct tape to seal all joints. Retract the electrical wire slack into the wall cavity or attic space. SKIP STEP 14. PROCEED DIRECTLY TO STEP 15.
- 14) FOR TRANSITION CONNECTIONS ONLY. Pull the electrical wire slack into the cabinet while raising the hood into position. Using the four screws provided, attach the hood to the bottom of the cabinet. Connect the appropriate transition(s) between the exhaust collar on the top of the hood and the duct work overhead. Note: The bottom of the transition(s) should fit inside the exhaust collar(s) on the top of the hood and on the inside of the duct work overhead. Use duct tape to seal all joints. Retract the electrical wire slack into the wall cavity or attic space.
- 15) From inside the hood, using UL listed wire nuts, attach the "neutral" wire(s) to the white lead(s), the "hot" wire(s) to the black lead(s), and the ground wire(s) to the green lead(s) inside the motor box(es).

Warning: Do not operate hood without proper ground connection.

- 16) Plug the motor(s) into the hood and reinstall the blower motor(s) using the three retaining screws that were previously removed in Step 8.
- 17) Replace the blower housing(s) and the blower shield(s). Make sure that the damper(s) open and close smoothly.
- 18) Refer to the Owner Maintenance Guide Operating Instructions for proper hood operation. Test all blower and light functions to ensure they are operating properly.

Because the Magic Lung® blower uses centrifugal filtration rather than conventional baffle or mesh filters, the Magic Lung® blower can handle cooking equipment with higher cubic feet per minute (CFM) requirements and can deliver equivalent CFM much more efficiently than other filtration systems. When comparing the Magic Lung® with other blower units made by other manufacturers, use the "Equivalent CFM".

Ratings in accordance with the Standard Test Code by the Energy Systems Laboratory of the Texas Engineering Experiment Station.

**VENTING** 

## Vent A Hood

**ACCESSORIES** 

