

Installation Instructions Raised Vent

READ AND SAVE THESE INSTRUCTIONS

TESTED IN ACCORDANCE WITH THE LATEST EDITION OF ANSI Z 21.1 STANDARD FOR HOUSEHOLD GAS COOKING APPLIANCES, ANSI/UL 858 HOUSEHOLD ELECTRIC RANGES, CAN/CSA-C22.2 NO. 64 STANDARD FOR HOUSEHOLD ELECTRIC COOKING AND LIQUID HEATING APPLIANCES, UL 507 ELECTRIC FANS, AND UL 858A STANDARD FOR SAFETY-RELATED SOLID-STATE CONTROLS FOR HOUSEHOLD ELECTRIC RANGES.

CONVENTIONS USED IN THESE INSTRUCTIONS



WARNINGS:

Must be followed carefully to avoid personal injury or damage.



NOTES:

Contain helpful hints and tips to facilitate the installation.

IMPORTANT

- 1. Before beginning installation, please thoroughly read and become familiar with these instructions.
- 2. Installation and service must be completed by a qualified installer or service agency.
- 3. Installer: Please leave these Installation Instructions with the owner.
- 4. Owner: Please keep these instructions for local electrical inspector's use and for future reference.
- 5. Read the accompanying Use & Care Manual prior to operating this appliance.

TABLE OF CONTENTS

Verifying the package contents	Page 2
Installation planning	Page 2
Overall dimensions	Page 2
Electrical power supply requirements	Page 2
Duct Planning	Pages 2-3
Countertop preparation	Page 4
Below countertop preparation	Page 4
Installing the raised vent	Page 5
Blower installation	Page 5
Connecting the exhaust duct	Page 5
Electrical connection	Page 5
Cooktop installation	Page 6
Verifying the operation	Page 6

IMPORTANT SAFETY INSTRUCTIONS

WARNINGS:

- 1. Read all instructions before using the appliance.
- 2. Install or locate this appliance only in accordance with these installation instructions.
- Use this appliance only for its intended use as described in this manual.
- Do not operate this appliance if it has a damaged electrical cord or plug, if it is not working properly or if it has been damaged or dropped.
- 5. This appliance should be serviced only by qualified service personnel. Contact the nearest DACOR Authorized Servicer at (800) 772-7778, or at www.dacor.com for examination, repair or adjustment.
- 6. Do not cover or block any openings on the appliance.

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.

- 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 guidelines 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 outdoors.
- To reduce the risk of fire, use only metal duct work to install raised vents.
- f) For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors.

WARNING

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

T CAUTION:

To Reduce the Risk of Fire And Electric Shock, Install This Downdraft Ventilation Unit Only with Remote Blower Models Rated Maximum 8 amp (total of all interconnected remote blowers), or blower model CABP3 manufactured by Dacor.

V 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.

Verifying the Package Contents

- Use and Care Manual
- · Anchoring Legs

Installation Planning

A qualified technician must complete the installation of this appliance. Proper installation is your responsibility.

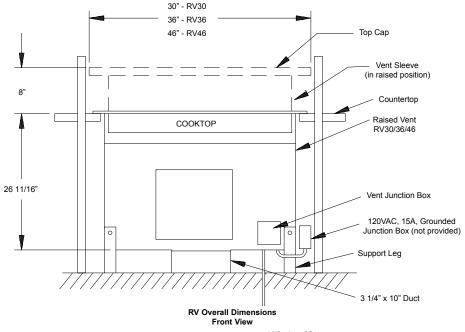
WARNING:

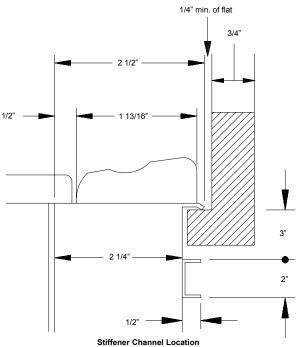
Failure to disconnect power may result in electrical shock or fire hazard! If the electric service provided does not meet the product specifications, do not proceed with the installation. Call the selling dealer or a licensed electrician.

Overall Dimensions

Raised Vent System Specifications				
Raised Vent For Use With For Use with BI Model No.		For Use with Blower	Duct Size	
RV30	30" Cooktops	CABP3, REMP3/16	3 1/4"x10", 8" & 10"	
RV36	36" Cooktops	CABP3, REMP3/16	3 1/4"x10", 8" & 10"	
RV46	46" Cooktops	CABP3, REMP3/16	3 1/4"x10", 8" & 10"	

For detailed information on the remote blowers, refer to the Remote Blowers Installation Instructions.





Electrical Power Supply Requirements

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 70-2002* (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

The correct 120VAC, 60Hz, 15A circuit must be supplied for this appliance from a separate, grounded, circuit that is protected by a properly sized circuit breaker or time delay fuse.

Duct Planning

WARNINGS

- To reduce the risk of fire and to properly exhaust air, ducted fans must be vented to outside. Do not vent exhaust air into spaces within walls, ceilings, attics, crawl spaces or garages.
- 2. Improper installation, adjustment, alteration, service, or maintenance can cause personal injury or property damage.
- 3. To reduce the risk of fire, use only ductwork materials deemed acceptable by state, municipal and local codes.

- Best performance is achieved by using round duct instead of rectangular, especially when elbows are required.
- 2. If multiple elbows are needed, ensure that there is a minimum of 24" of straight duct between any two elbows.
- 3. Avoid "S" or "back to back" configurations caused by adjacent elbows.
- 4. Thermal breaks, such as a short section of non-metallic duct, should be used in areas of extreme cold.
- 5. A back-draft damper at the duct outlet may also be required.
- 6. Do not use flexible metal duct.
- 7. Do not use ductwork that is smaller in cross-sectional area than the recommended size duct.

- Do not rely on duct tape alone to seal duct joints. Use sheet metal screws as require to support the duct weight.
- The raised vent and cooking appliance(s) must be removable if service is required.
- Be certain that the ductwork does not interfere with floor joists or wall studs.
- 11. It is important to keep a minimum number of turns in the duct run, and to keep the run as short as possible.
- 12. Do not restrict the air flow by reducing the duct cross-sectional areas when making hard joints or squeezing through a tight area.
- 13. With concrete slab construction, "box-in" the ductwork to prevent it from collapsing when the wet concrete is poured. Also allow room for electrical conduit.
- Cross-drafts or air currents caused by adjacent open windows or doors, HVAC outlets, ceiling fans, and recessed ceiling lights reduce vent efficiency.

Higher volumes of air exhausted by the vent system result in better overall removal of smoke and fumes from the kitchen. Longer duct runs and greater numbers of duct transitions reduce air volume, therefore it is extremely important to keep duct runs as short and straight as possible.

To ensure that your installation meets this requirement, add the actual straight length of duct to the equivalent straight length of all duct fittings to determine the total equivalent straight length of duct. (Refer to the table above, which shows various common duct fittings with their equivalent straight lengths for various common duct sizes). If this total equivalent straight length is less than or equal to the maximum limits specified, then the installation is proper. Consider the duct size that corresponds to the majority of the duct used in the installation. Sample problem:

Given a remote REMP3/16 system installation having 25 feet of 3 $\frac{1}{4}$ " x 10" rectangular duct, one (1) 90-degree 3 $\frac{1}{4}$ " x 10" elbow, and one (1) 3 $\frac{1}{4}$ " x 10" to 8" or 10" round transition, would this installation be proper? Solution:

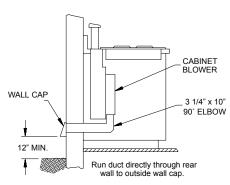
- 1. Add the total length of straight duct: 25' (of $3\frac{1}{4}$ " x 10") = 25'.
- Using Table above, determine the equivalent straight length of all duct fittings: 90-degree 3 ¼" x 10" elbow = 15'. 3 ¼" x 10" to 8" or 10" round transition = 4'.

Model	Duct Size	Maximum Equivalent Straight Lengths			
#		CABP3	REMP3	REMP16	
RV	8"	50'	60'	70'	
	10"	40'	50'	80'	
	3 1/4"x10"	40'	50'	70'	

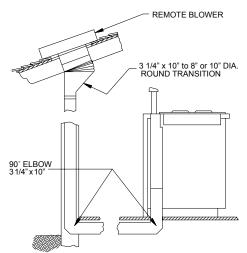
3 1/4" x 10" 90° Elbow	3 1/4" x 10" 45° Elbow	3 1/4" x 10" Wall Cap	3 1/4" x 10" 90° Flat Elbow	
15 Feet	7 Feet	2 Feet	20 Feet	
Transistion 3 1/4" x 10" to Round	45° Elbow - Round Duct	90° Transistion 3 1/4" x 10" to 8"/10" Round	90° Elbow - Round Duct	
8" Diameter - 4 Feet 10" Diameter - 4 Feet	8" Diameter - 3 Feet 10" Diameter - 2 Feet	25 Feet	8" Diameter - 7 Feet 10" Diameter - 5 Feet	

- Add (1) and (2) to determine the total equivalent straight length of the complete duct system: 25' + 15' + 4' = 44' total equivalent straight duct length.
- For the remote system with 3 ¼" x 10" duct, the maximum allowable total equivalent straight length of duct is 50 feet. Thus, this proposed installation is proper.

After determining that your proposed ductwork meets the maximum duct length requirement, proceed with the location planning.



RV30/RV36/RV46 with CABP3 Cabinet Blower, Direct Connection



Run duct under floor (between joists) to nearest wall and up to roof-mounted Remote Blower

RV30/RV36/RV46 with REMP3/16 Remote Blower, Island Installation

Dacor Model No.	Cutout "A"	Cutout "B"	Cutout "C"	Cutout "D"	Dimension "t", max.	Overall Width
CER304	19 7/8"	28 1/2"	27 1/2"	2 3/8"	3/4"	30"
CER365	19 7/8"	34 1/2"	33 1/2"			36"
ETT304	19 7/8"	28 1/2"	27 1/2"			30"
ETT365	19 7/8"	34 1/2"	33 1/2"			36"
SGM304	22 1/4"	27 1/2"	27 1/2"			30"
SGM364	22 1/4"	33 3/4"	33 1/2"			36"
SGM365	22 1/4"	33 3/4"	33 1/2"			36"
SGM466	19 7/8"	44 1/2"	43 1/2"			46"

Countertop Preparation



WARNINGS:

- To reduce the risk of personal injury caused by reaching over a hot appliance, cabinet storage space located directly above the cooktop should be avoided.
- 2. Do not store combustible materials or items adversely affected by heat in cabinet areas above the appliance.
- Follow the instructions regarding minimum safe clearances and installation location. Failure to do so may result in a fire or safety hazard.



NOTE:

When installing the cooktop and vent into a laminated (Formica®, etc.) or synthetic (Corian®, etc.) countertop, follow the countertop manufacturer's instructions regarding the minimum corner radius, use of heat reflective tape, reinforcement of corners, etc.

Plan the installation so that all required minimum clearances between the cooktop. overhead cabinets and adjacent vertical walls are provided. Refer to the cooktop installation instructions for the minimum dimensions specific to the particular appliance being installed.

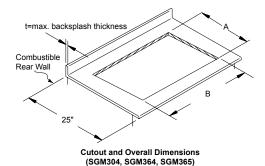
The DACOR Raised Vent System is designed to remove the contaminants and by-products that result when cooking with gas or electric appliances. The vent system consists of the vent intake along with a remote blower or a cabinet blower. The raised vent downdraft systems are compatible for use with select DACOR cooktops, therefore, these instructions offer specific guidelines for mounting the raised vents behind DACOR cooktops.

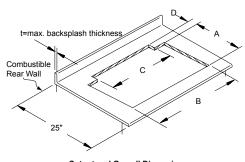


NOTE:

Verify that the raised vent and blower being installed are a matched pair before beginning the installation.

For installation of the raised vent system, provide an opening in the countertop as shown in the Countertop Preparation Section. Position the cutout so all required minimum clearances are met. Make certain that the minimum flat countertop area meets or exceeds the combined overall width and overall depth, as shown.





Cutout and Overall Dimensions (CER304, CER365, ETT304, ETT365, SGM466, SGM464GG)

Below Countertop Preparation

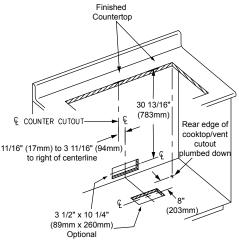
The raised vent intake, blower (in cabinet mounted models only), and cooktop are designed for installation into standard U.S. made base cabinets. Before making the countertop cutout, make certain that the cooktop and vent system will clear the cabinet walls, backsplash, and any wall studs along the back wall within the cabinet.



NOTES:

- If there is a backsplash with a curved base at the countertop level, then the clearance behind the vent will be reduced. Keep this in mind to avoid interference.
- If your cabinet differs from the standard 24" deep, 36" high cabinets, then adjust your cutout locations accordingly to prevent interference.
- If a drawer or shelf is being installed below a gas cooktop, be certain to avoid interference with the gas supply line and the drawer or shelf.
- 4. For installation with gas cooktops, a 90-degree elbow must be connected to the cooktop gas inlet to avoid interference with the Raised Vent plenum front.

Locate the house junction box adjacent to the vent junction box found at the lower right of the vent plenum.



Down Duct Cutout Dimensions RV with CABP3 Blower



NOTE:

Access from the front of the cabinet to the underside of the cooktop, the vent system, and the junction box must be provided for inspection and service. Any drawers or shelves placed below the cooktop and in front of the vent must be easy to remove for access to the cooktop, vent and junction box.

Installing the Raised Vent

Loosely attach the support legs to the left and right sides of the plenum using the hex nuts provided. Place the vent into the rear of the countertop cutout. Adjust the support leg height so that the end caps are gently resting on the counter, then tighten the hex nuts. Secure the support legs to the cabinet floor with the screws provided.

For the cabinet blower application, place the adhesive-backed foam tape provided with the cabinet blower onto the left and right vertical blower flanges. Slide the blower outlet into the exhaust duct, while making sure that the lower blower flange slides into the blower mounting groove on the vent. Use duct tape to seal the connection between the blower outlet and the duct. Support the duct weight as necessary to ensure sealed joints.

For downdraft vents utilizing the remote blowers, locate the vent cover found in the RV carton. Attach the adhesive-backed foam tape provided with the blower to the left and right vertical blower cover flanges. Attach the vent cover to the large opening in the front of the vent. The vent is now ready to be ducted for a remote blower installation



NOTE:

For both the cabinet and remote systems, the vent must be installed in a vertical orientation. Do not mount the vent on a slant or angle.

Blower Installation



WARNING:

Do not slide the CABP3 blower over or beyond the mounting stop on the blower mounting groove. To do so may prevent the vent sleeve from raising and/ or lowering due to interference between the blower and the vent drive arm assembly.

Connecting the Exhaust Duct



NOTE:

Use duct tape to seal the connection between the blower outlet and duct. Support the duct weight as necessary to ensure sealed joints.

For the side or bottom knockouts use the supplied transition (P/N 26619). For the rear knockout attach a 3 1/4" x 10" duct.

Electrical Connection



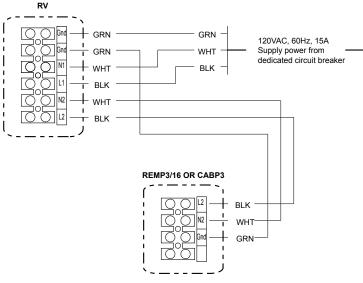
WARNINGS:

- Ensure that the power supply is disconnected before proceeding.
- 2. Verify that the power supply matches the ratings found on the appliance data plate before proceeding.
- The complete appliance must 3. be properly grounded at all times when electrical power is applied.
- 4. Do not ground the appliance with the neutral (white) house supply wire. A separate ground wire must be utilized.
- 5. If aluminum house supply wiring is used, splice the appliance copper wires to the aluminum house wiring with special connectors designed and agency-certified for this purpose. Follow the connector manufacturer's recommended procedure carefully. Improper connection can result in a fire hazard.

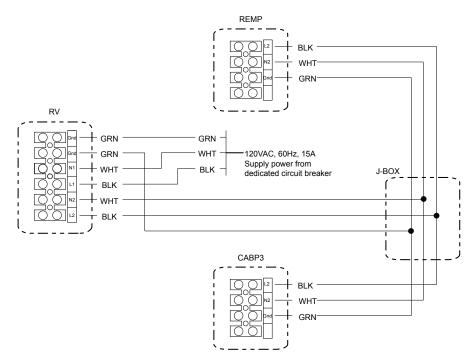
Failure to complete electrical connections properly may result in a damaged or nonfunctional system. Follow the wiring diagrams carefully to ensure a proper installation.

Both vent systems require a properly grounded, 120 VAC, 60 Hz., 15 Amp electrical service. Max. full line load is 8 amps. Always use a dedicated circuit. Do not use the same circuit that the cooktop is using.

Make all electrical connections between the vent and blowers, then connect power to the vent as per the wiring diagrams shown on Page 5. Use wire nuts provided and electrical tape to secure all wiring connections at the blowers.



Wiring of RV with REMP3/16 or CABP3



Wiring of RV with REMP3/16 and CABP3

Cooktop Installation

Set the cooktop into the countertop opening so that the back edge of the cooktop overlaps the leading edge of the vent. (Refer back to Page 4.)

Follow the cooktop manufacturer's installation instructions regarding securing the cooktop to the countertop and completing the electrical and/or gas connection.



NOTE:

Do not use a hardening compound or caulking to permanently seal the cooktop and vent into place, as the units must be easily removed for service. If such a hardening compound is used, removal of the units will be at the customer's expense.

Verifying the Operation

Please read the accompanying Use & Care Manual carefully. Important safety, service and warranty information is contained within this manual.



WARNINGS:

- If the vent system is not operational after completion of the installation, do not attempt to repair it. See the Problem **Solving Section of the Use** & Care Manual, then call a qualified service technician if the system is still not functional.
- Always disconnect the appliances from the electrical power when servicing them.

- Install the two (2) grease filters and the grill prior to operating the vent. Refer to the Use & **Care Manual for instructions** regarding filter and grill installation.
- Ensure that the top cap on the vent intake does not catch on the back edge of the cooktop when the intake is lowered. If interference does occur, adjust the position of the cooktop by moving it against the front edge of the countertop cutout, then re-secure the cooktop to the countertop. Also, ensure that the vent support legs have been properly secured to the cabinet base using the screws provided in the instructions envelope. Failure to eliminate interference may result in permanent damage to the vent.

Specifications contained within are subject to change without notice. No liabilty is assumed by DACOR for changes in specifications.

