

RV30, RV36, RV46

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30, 36, 46 Inch Wide, Renaissance® Raised Vent

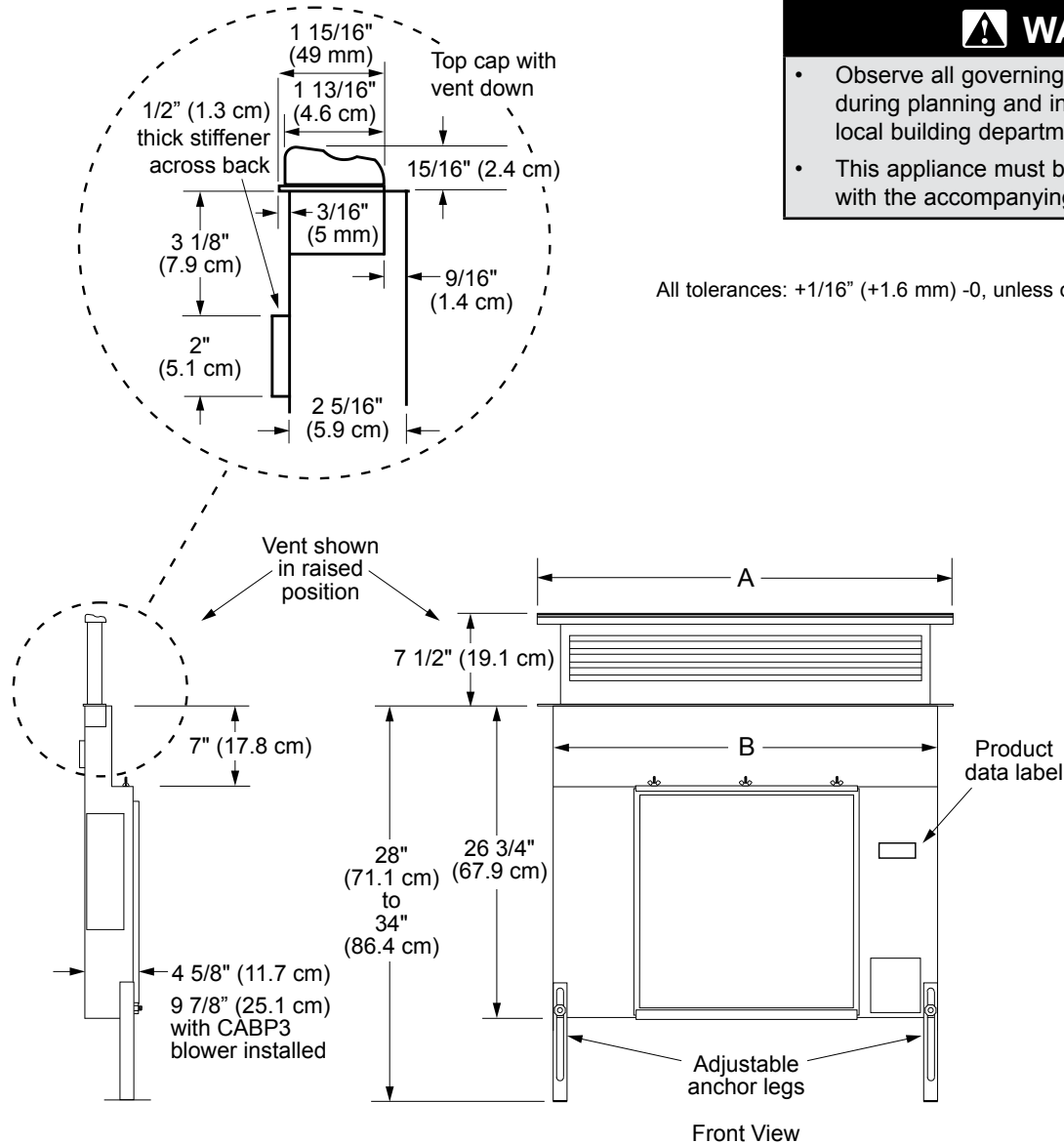
PLANNING GUIDE



WARNING

- Observe all governing codes and ordinances during planning and installation. Contact your local building department for further information.
- This appliance must be installed in accordance with the accompanying installation instructions.

All tolerances: +1/16" (+1.6 mm) -0, unless otherwise stated



Model Number	A - Top Cap Width	B - Chassis Width
RV30	30" (76.2 cm)	27 3/8" (69.5 cm)
RV36	36" (91.4 cm)	33 3/8" (84.8 cm)
RV46	46" (116.8 cm)	43 3/8" (110.2 cm)



NOTES:

1. Install these raised vents only with approved Dacor cooktops. See the planning guide for the particular appliance for proper applications and cutout information.
2. This appliance must be installed in conjunction with a single Dacor approved cabinet, remote or in-line blower. See following pages for approved blowers. For detailed information on the remote and in-line blowers, refer to the blower's installation instructions.



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Electrical Specifications

WARNING

The electric service for the raised vent 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 70- 2002* (or latest revision) and local codes and ordinances.

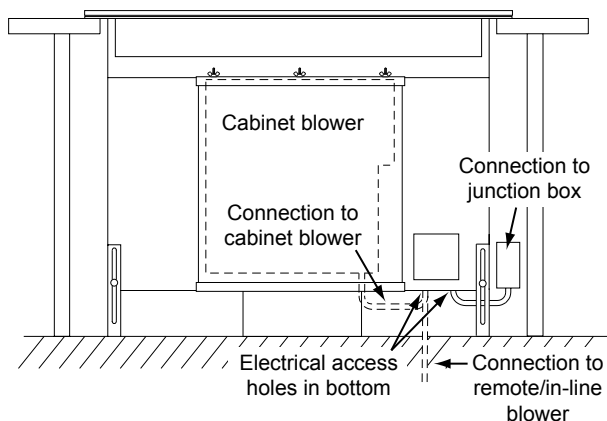
*A copy of this standard may be obtained from:

National Fire Protection Association
1 Batterymarch Park
Quincy, Massachusetts 02269-9101

Electrical Requirements

Power must be supplied by a separate, grounded, single phase circuit protected by a properly sized circuit breaker or time delay fuse and rated at 120 Vac, 60 Hz, 15 Amps.

- The above specifications are for reference only. If the power supply requirements shown above do not agree with those listed on the product data label, use the ratings on the label.
- The suggested location of the junction box supplying power to the unit is to the bottom right of the unit, providing local codes permit.
- Install 3 conductor wiring/conduit with minimum current carrying capacity of 8 Amps to supply power to the internal cabinet blower or remote blower from the raised vent when turned on.
- When installing a remote or in-line blower run the wiring/ conduit parallel to the duct work and connect it to the remote blower and raised vent on the ends. There are two 7/8" access holes in the bottom of the raised vent for connecting the wiring to the blower and connecting the vent to the power supply junction box.



ELECTRICAL LAYOUT

General System Layout

The vent system consists of the raised vent itself and a single Dacor approved remote blower or internal cabinet blower.

Raised Vent Model No.	Approved Blowers	Duct Sizes
RV30	CABP3, ILHSF8, ILHSF10, REMP3, REMP16	3 1/4" x 10", 8" round, 10" round
RV36		
RV46		

WARNING

- Failure to install an approved blower and proper duct work will result in a back draft and/or the insufficient venting of smoke and fumes.
 - 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.
 - Follow the instructions and diagrams for minimum safe clearances and installation location in these instructions, the appliance installation instructions and the blower installation instructions. Failure to do so may result in a fire or safety hazard.
- Install the raised vent, blower and cooktop so that they can be removed if service is required.
 - Refer to the cooktop planning guide for the minimum cutout dimensions specific to the particular raised vent model being installed.
 - The raised vent is equipped with adjustable anchor legs to accommodate various cabinet heights.
 - All contact surfaces between the raised vent and any cabinets or walls must be solid and at right angles.

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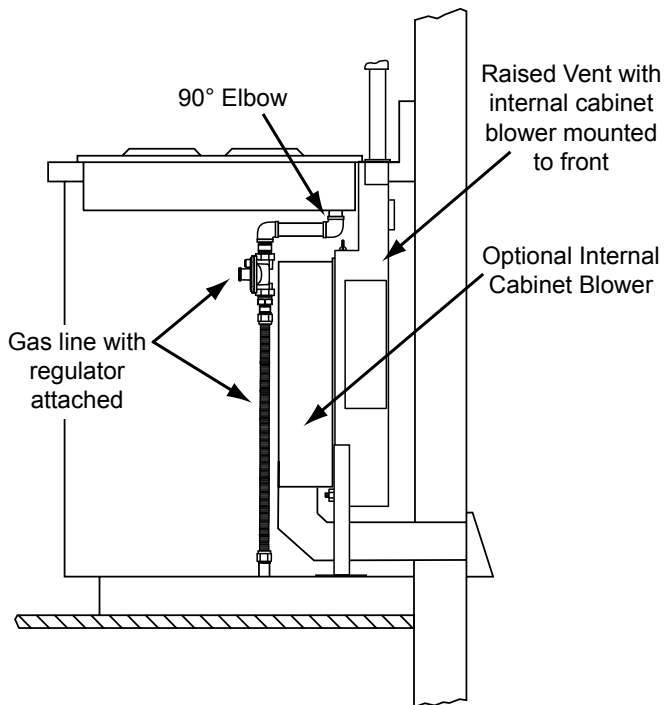


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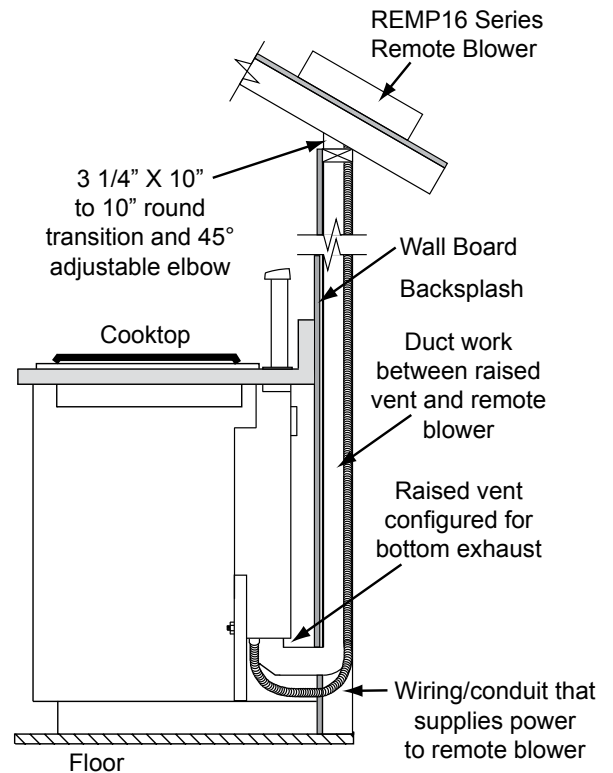
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General System Layout (continued)

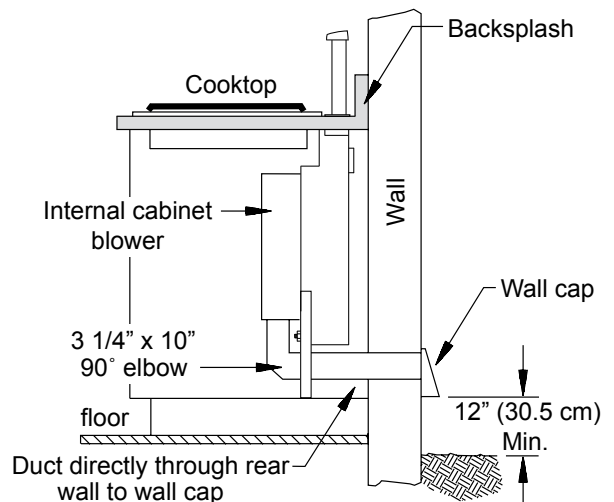
- The raised vent exhaust may be configured to vent through the bottom or through one of the sides. Allow room for the exhaust duct coming out of the unit. See Planning the Duct Work for additional details.
- The maximum allowable duct run must be taken into consideration when determining the layout. See Planning the Duct Work for further details.
- Access from the front of the cabinet to the underside of the cooktop, the vent system and the electrical and gas supplies for the cooktop and vent 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 utilities.
- For installation with gas cooktops, a 90-degree elbow must be connected to the cooktop gas inlet (see diagram below) to avoid interference with the raised vent's front panel.



**EXAMPLE OF GAS LINE ROUTING FOR GAS COOKTOP
INSTALLATIONS - SIDE VIEW**



**EXAMPLE OF LAYOUT WITH
REMOTE BLOWER, ROOF EXHAUST**



**EXAMPLE OF LAYOUT WITH
CABINET BLOWER, EXHAUST THROUGH WALL**

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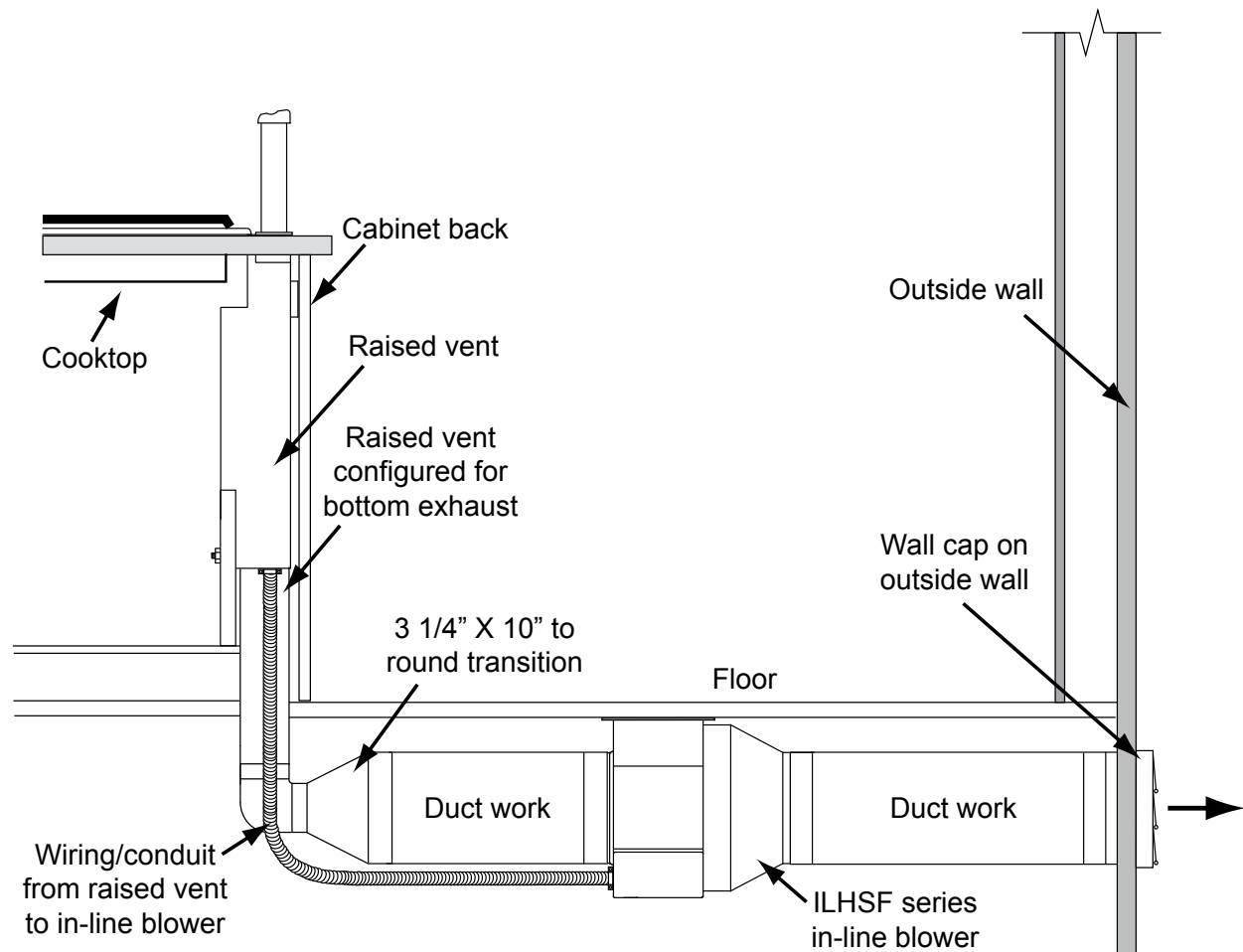
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General System Layout (continued)



**EXAMPLE OF LAYOUT WITH IN-LINE BLOWER, DUCT WORK
UNDER FLOOR, WALL EXHAUST**

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Planning the Duct Work

WARNING

- 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.
- Tape all duct joints securely to prevent combustion by-products, smoke or odors from entering the home. Doing so will also improve system efficiency.
- For proper operation this unit must be installed with a remote blower or internal cabinet blower. Use only one of the models specified.
- TO REDUCE THE RISK OF FIRE, USE ONLY METAL DUCT WORK.
- DO NOT install more than one blower. Even small differences between blower air flow rates can greatly reduce the air draw by the raised vent.

You must install one of the Dacor blower models listed below for proper operation. For models REMP3 or REMP16, see the REMP3/16 Remote Blower Installation Instructions. For model CABP3, see the instructions later in this manual. Only one blower shall be installed.

BLOWER RATINGS FOR DACOR BLOWERS APPROVED FOR USE WITH RV SERIES RAISED VENTS	
Model Number	Rating
CABP3 (cabinet)	600 CFM*
ILHSF8 (in-line)	600 CFM**
ILHSF10 (in-line)	1100 CFM**
REMP3 (remote)	600 CFM**
REMP16 (remote)	1000 CFM**

* Nominal rating at zero inches static pressure, see the CABP3 Cabinet Blower Data for actual rating.

** Nominal rating at zero inches static pressure. See the blower installation instructions for actual blower rating.

- The raised vent can be configured to exhaust through the bottom or either side:
 - ▶ On installations using a remote or in-line blower, the cover plate on the appropriate side or on the bottom is removed to expose the exhaust. Configure the raised vent for bottom exhaust and use an elbow to vent through the rear cabinet wall.
 - ▶ On installations using the CABP3 blower, the blower assembly is mounted to the front of the raised vent with the exhaust pointing in the desired direction. Point the exhaust down and use an elbow to vent through the rear cabinet wall.
- When planning new duct work, always look for the shortest, most direct route to the outside. Calculate the maximum duct length (see following pages) to determine if the planned duct route will work with the blower selected.
- On bottom exhaust installations you may cut a hole in the floor to allow the duct work to pass through.
- All duct work materials (including screws and duct tape) must be purchased separately by the customer.

- 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.
- Do not rely on duct 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 weights.
- To prevent back-drafts, a damper at the duct outlet may also be required.
- Make sure duct work does not interfere with floor joists or wall studs.
- With concrete slab construction, "box-in" the duct work to prevent it from collapsing when the wet concrete is poured. Also allow room for electrical wiring from the remote blower.
- Cross-drafts or air currents from adjacent open windows or doors, heating/air conditioning outlets, ceiling fans and recessed ceiling lights reduce vent efficiency.

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, with as much space between each bend as possible.
- For best performance, use round duct instead of rectangular when possible, especially when elbows are required.
- If multiple elbows are used, try to keep a minimum of 24" of straight duct between them. Avoid "S" or "back to back" configurations of adjacent elbows.
- Do not use flexible metal duct.

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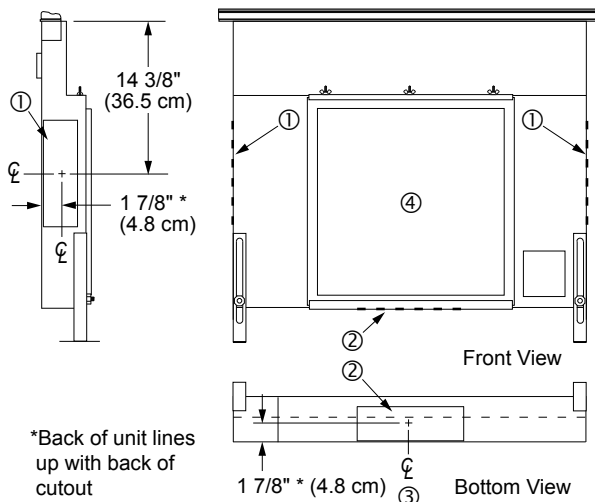
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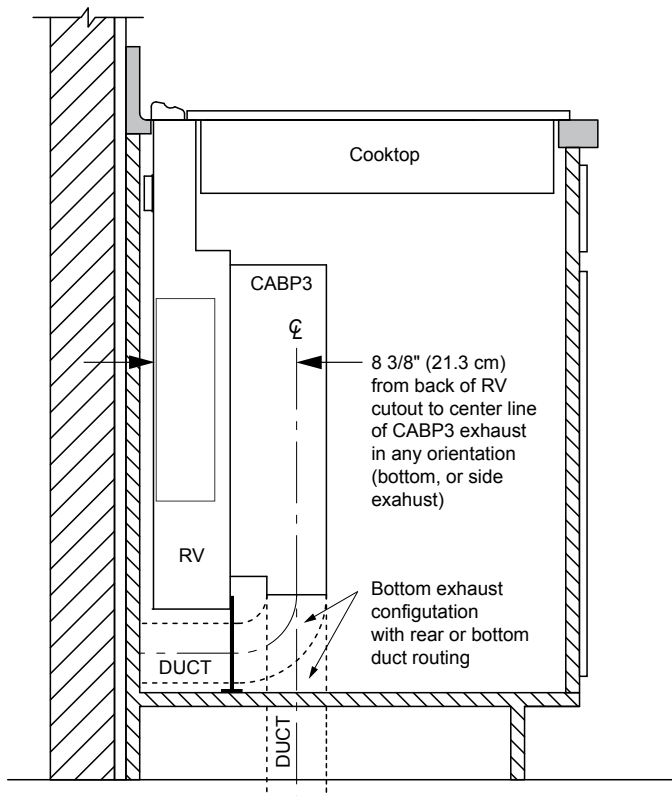
Planning the Duct Work (continued)



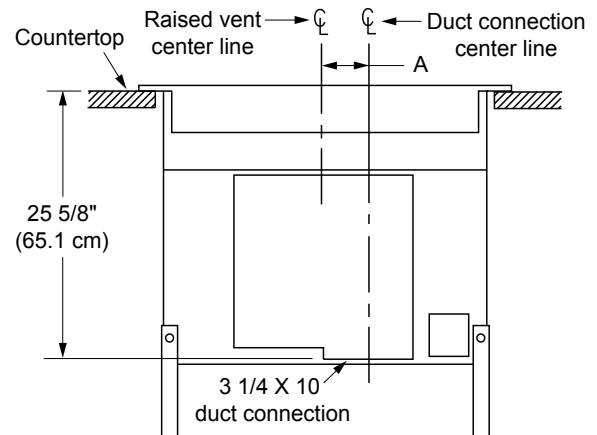
*Back of unit lines
up with back of
cutout

- ① Side Exhaust Locations (3 1/4" X 10")
- ② Bottom Exhaust Location (3 1/4" X 10")
- ③ Vertical center line of bottom exhaust lines up with vertical center line of chassis
- ④ Internal cabinet blower mounting location

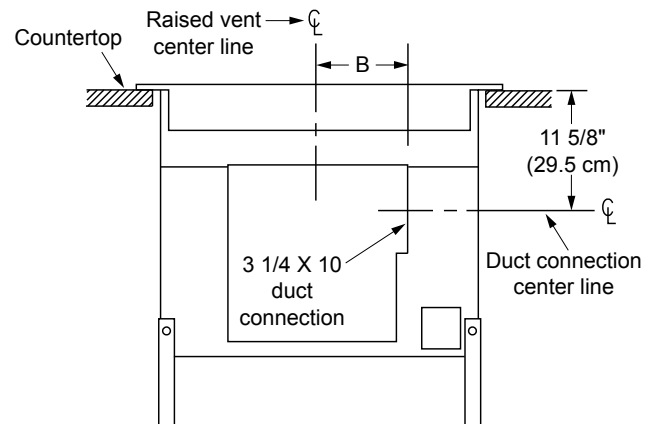
EXHAUST LOCATIONS AND DIMENSIONS FOR IN-LINE/REMOTE BLOWER CONFIGURATIONS (ILHSF OR REMP SERIES BLOWERS)



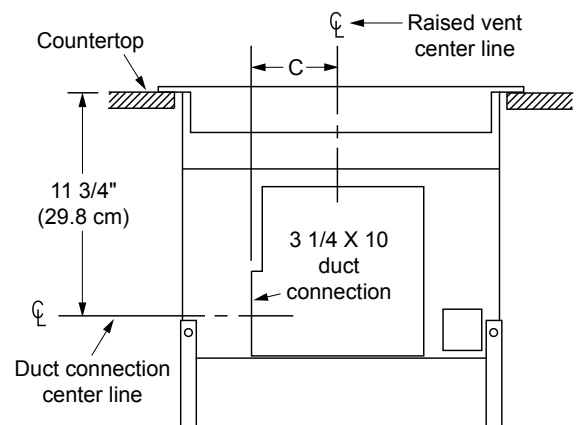
EXHAUST LOCATIONS AND SIDE DIMENSIONS FOR CABP3 INTERNAL CABINET BLOWER



FRONT EXHAUST DIMENSIONS CABP3 BLOWER - BOTTOM EXHAUST



FRONT EXHAUST DIMENSIONS CABP3 BLOWER - RIGHT EXHAUST



FRONT EXHAUST DIMENSIONS CABP3 BLOWER - LEFT EXHAUST

Model	A	B	C
RV30 RV36	2" (5.1 cm)	6" (15.2 cm)	12" (2.05 cm)
RV46	5" (12.7 cm)	9" (22.9 cm)	9" (22.9 cm)

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Calculating the Maximum Duct Run Length

- Do not use duct work that is smaller in cross-sectional area than the required duct sizes in the table to the right.
- For best performance, keep the duct run as short as possible and never exceed the maximums stated at the right.
- The maximum straight duct length for the raised vent system depends on the model of remote or in-line blower used with the vent system and the number of elbows and transitions used. The **Equivalent Number of Feet** for each elbow and transition (see table) must be subtracted from the maximum straight length to compensate for wind resistance. To determine the maximum allowable length of the duct work, subtract all of the equivalent lengths of the elbows and transitions from the **Blower Maximum Duct Straight Length**.

For example, for a raised vent system using 3 1/4" X 10" rectangular duct, two (2) 3 1/4" X 10" 90° elbows, a 3 1/4" X 10" rectangular to 10" round transition with a REMP16 remote blower:

- ▶ From the Maximum Equivalent Straight Length table, the maximum length without transitions and elbows is 60 feet.
- ▶ The equivalent length of each 90° elbow is 15 feet.
- ▶ The equivalent length of 45° elbow is 2 feet.
- ▶ The equivalent length of the transition is 4 feet.
- ▶ The total equivalent length of the above components is: 15 feet + 15 feet + 4 feet + 2 feet = 36 feet.
- ▶ The maximum amount of straight duct that can be used with a REMP16 and the above components is: 60 feet - 34 feet = 24 feet.

Equivalent Number of Feet - Duct Elbows and Transitions			
45° elbow 8 Inch	3 feet	3 1/4" X 10 45° elbow	7 feet
45° elbow 10 Inch	2 feet	3 1/4" X 10 90° elbow	15 feet
90° elbow 8 Inch	7 feet	3 1/4" X 10 90° flat elbow	20 feet
90° elbow 10 Inch	5 feet	3 1/4" X 10 to 8" round transition	4 feet
90° 3 1/4" X 10 to 8" round transition	25 feet	3 1/4" X 10 to 10" round transition	4 feet
Roof cap*	**	Wall cap with damper*	**

* For installations using the CABP3 internal cabinet blower.

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

Blower Maximum Duct Straight Length			
Blower Used	8 Inch Duct	10 Inch Duct	3 1/4" X 10" Duct
CABP3	50 feet (15.2 meters)	40 feet (12.2 meters)	40 feet (12.2 meters)
ILHSF8	60 feet (18.3 meters)	50 feet (15.2 meters)	50 feet (15.2 meters)
ILHSF10	70 feet (21.3 meters)	80 feet (24.4 meters)	70 feet (21.3 meters)
REMP3	60 feet (18.3 meters)	50 feet (15.2 meters)	50 feet (15.2 meters)
REMP16	70 feet (21.3 meters)	80 feet (24.4 meters)	70 feet (21.3 meters)