

**WARNING: Improper installation, adjustment, alteration, service, or maintenance can cause property damage, injury or death. Read the installation, operation, and maintenance instructions thoroughly before installing or servicing this equipment.**



## Dual Vent Kit, Option CC5

**Installation Form RGM 452/456-DV  
Obsoletes Form 456-DV**

**REZNOR** *Thomas&Betts*

**APPLIES TO: INFRA-REZ™ Heater  
Models TR/TR-H and Model TRP**

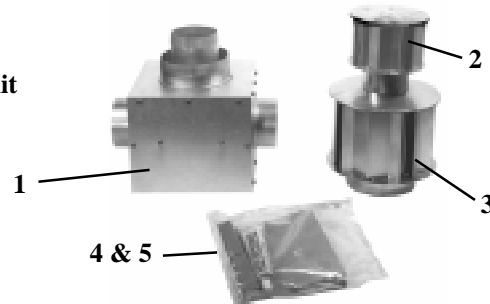
## Description/Application

The dual vent option kit permits power venting of these models of tubular radiant heaters through only one opening in the roof or side wall of a building. The concentric design of the vent allows each of the two heaters to be safely operated totally independent of the other. The two heaters may be controlled by the same or different thermostats. Heaters vented through the optional dual vent do not have to match in capacity, length, configuration or model. The adapter box in the dual vent kit converts the two separate vent pipe runs into the concentric vent terminal arrangement. The dual vent adapter box is an aluminized sheet metal box that attaches indoors, close to the wall or roof opening.

Option CC5, Package P/N 120736, includes:

Code	Qty	P/N	Description
1	1	120290	Dual Vent Adapter Box
2	1	110051	4" Vent Cap
3	1	120869	6" Vent Cap
4	1	53335	Tube of High Temperature Silicone
5	2	120108	Support Angles

**Figure 1 -  
Option CC5  
Dual Vent Kit**



## Heater Vent Length Requirements

**Reference: Models TR/TR-H -- Refer to Heater Installation Form RGM 456, Paragraph 11  
Model TRP -- Refer to heater Installation Form RGM 452, Paragraph 9**

Include the length of the concentric pipe and one equivalent elbow length (for the flow losses through the adapter box) in the vent length of each heater. See the Vent Length Table below for maximum allowable vent lengths by size and length of heater. Maximum length of the concentric portion of vent pipe is six feet.

Vent pipe is field-supplied. Use only single-wall metal pipe.

### Vent Length Table - Applies to Heater with Dual Vent Option CC5

Calculate each vent length separately, including the equivalent length for the dual vent adapter box and the length of the concentric pipe from the box to the vent cap, in the total vent length for **each** heater. Do not exceed maximum vent length.

Model	Input Size (000)	Straight Tube Length (ft)	Vent Diameter (inches)	Vent Length (ft)		Equivalent Length (ft) for			Maximum Length (ft) of Dual Vent Concentric Pipe
				Maximum	Minimum	90° Elbow	45° Elbow	Dual Vent <sup>1</sup> Adapter Box	
TR/TR-H	50	20, 25, 30	4	20	5	3	1-1/2	3	6
		20, 25	4	45	5	6	3	6	6
	75	30, 35	4	35	5	5	2-1/2	5	6
		40	4	20	5	3	1-1/2	3	6
	100	30, 35	4	45	5	6	3	6	6
		40, 45	4	35	5	5	2-1/2	5	6
		50	4	20	5	3	1-1/2	3	6
	125	40, 45, 50	4	60	5	12	6	12	6
	150	40, 55, 60	4	60	5	12	6	12	6
175	50, 55, 60, 65, 70	4	60	5	12	6	12	6	
200	50, 55, 60, 65, 70	4	60	5	12	6	12	6	
TRP	30-100	N/A	4	40	5	6	3	6	6

<sup>1</sup> Include equivalent length of dual vent adapter box and actual length of concentric pipe in the total vent length of **each** heater.

## Installation Instructions

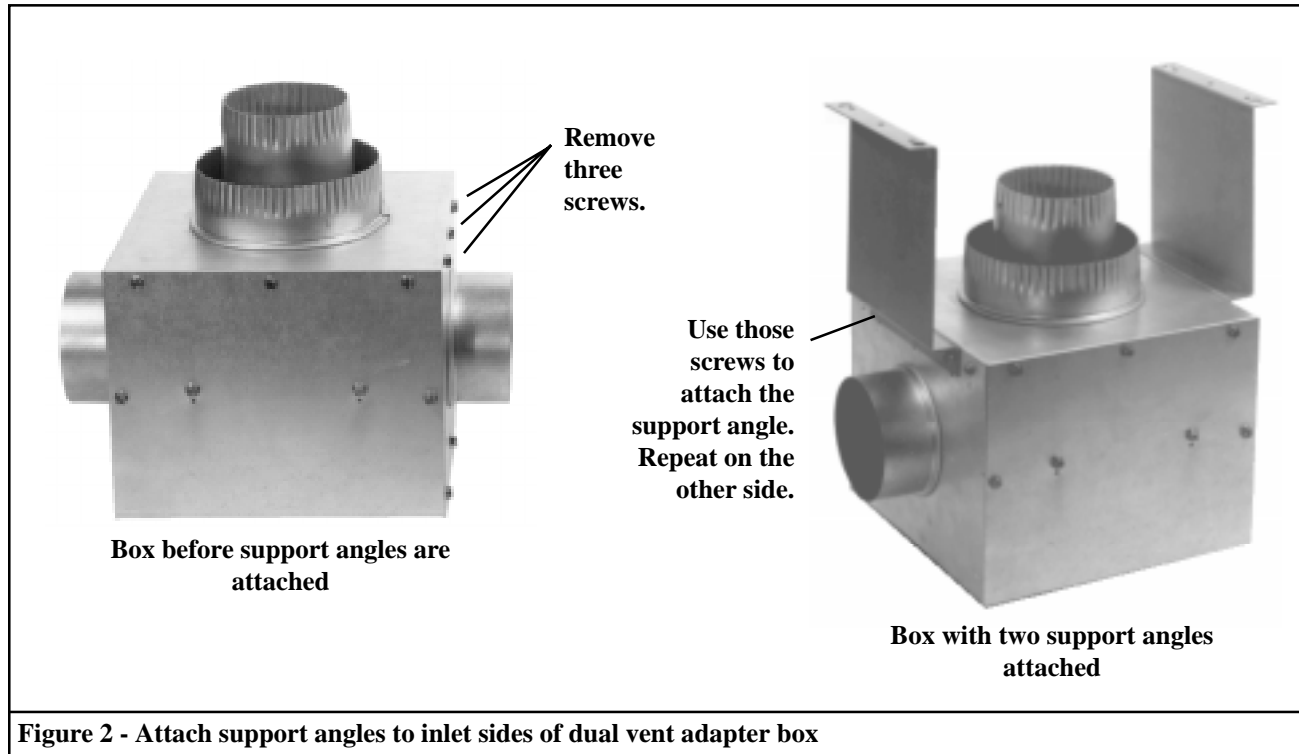
Installation should be done by a qualified agency in accordance with these instructions and in compliance with all codes and requirements of authorities having jurisdiction.

### 1. Attach Dual Vent Adapter Box Support Angles

On one of the inlet sides of the adapter box, remove the three factory-installed screws.

Use these screws to attach the support angle. See Figure 2.

Repeat, attaching the second support angle to the opposite side of the box.



### 2. Attach Concentric Vent Terminal Pipes to Dual Vent Adapter Box

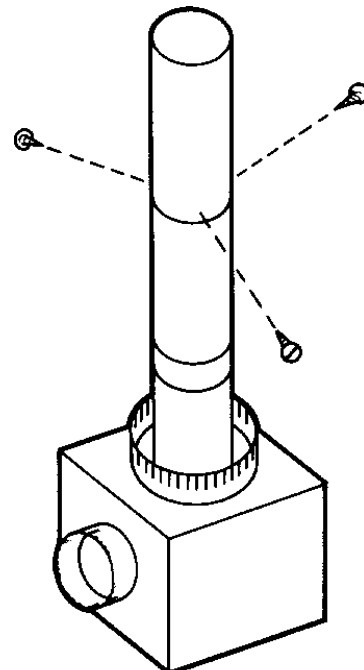
Attach the 4"-diameter vent terminal pipe to the inner concentric 4" pipe on the adapter box. See Figure 3. Secure with three non-corrosive screws spaced evenly around the pipe. Seal joint with aluminum or TEFLON® tape (TEFLON® is a tradename of DuPont Chemical Corporation) suitable for 550°F (Option FA1, P/N 98266, or equivalent).

Following the same procedure, install any additional sections of 4" pipe. The overall length of the 4"-diameter inner pipe must be at least 12" longer than the outer concentric pipe. (Maximum length for the concentric terminal pipe is six feet.)

Slide the outer, 6"-diameter vent terminal pipe over the 4" pipe. Attach and secure the 6" outer pipe to the collar on the adapter box using three non-corrosive screws (the same as the 4" pipe) and seal the joint.

Follow the same procedure for additional joints.

**Figure 3 - Attach 4" and 6" vent terminal pipes concentrically**

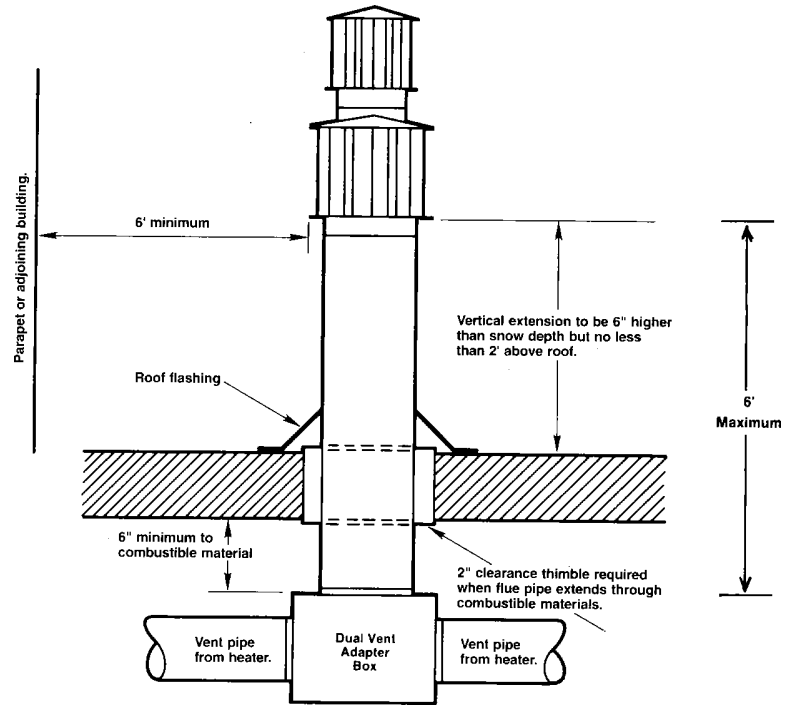


**3. Install Dual Vent Adapter Box Indoors with Attached Concentric Vent Pipe Exiting through the Roof or Wall**

Follow the requirements in either Figure 4A or 4B to select a location for the vent terminal.

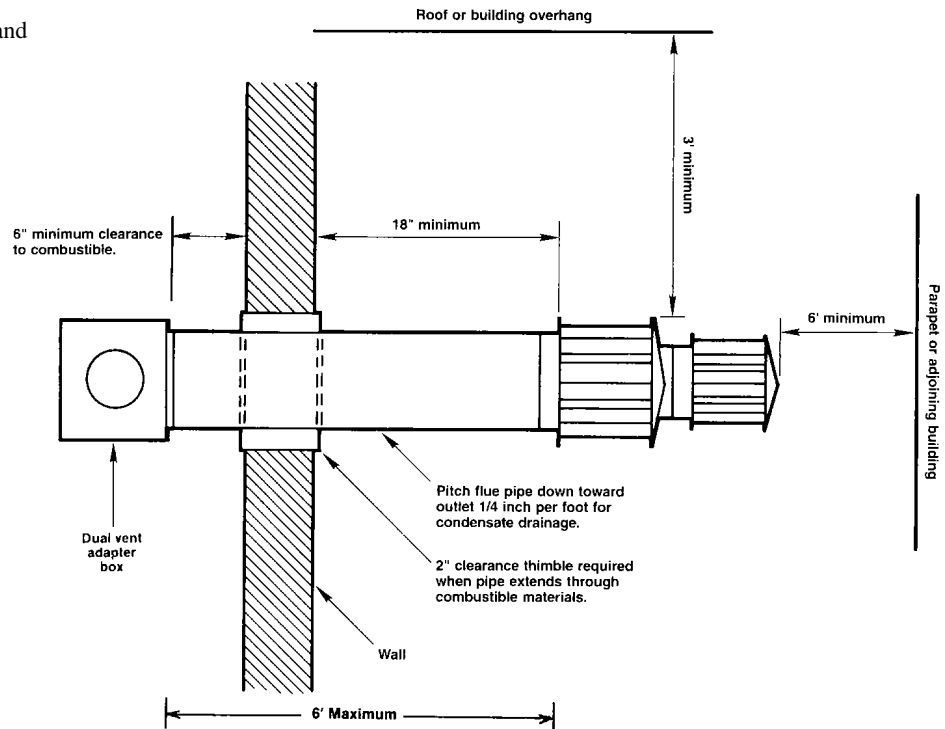
**Figure 4A - Vertical Dual Vent Terminal**

Single wall outer pipe and single wall inner pipe



**Figure 4B - Horizontal Dual Vent Terminal**

Single wall outer pipe and single wall inner pipe



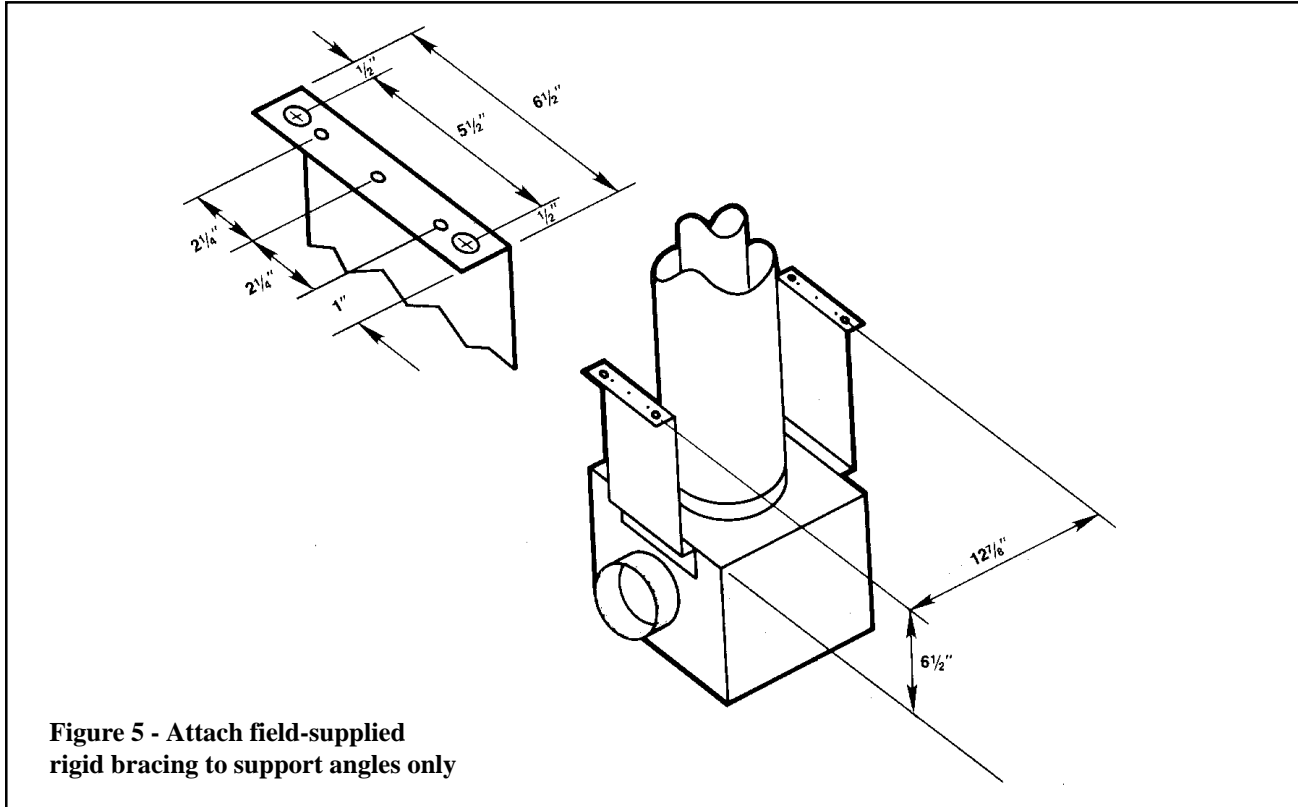
## Installation Instructions (cont'd)

### 3. Install Dual Vent Adapter Box (cont'd)

The dual vent adapter box must be attached securely to the building to adequately support the weight of the adapter box plus the concentric pipes and the two vent caps. Following dimension and clearance requirements in either Figure 4A or 4B and in Figure 5, attach field-supplied rigid bracing or supports to the metal support angles attached to the box in Step 1. Attach bracing or supports only at the support angles provided.

(If the support is attached elsewhere to the adapter box, it may be impossible to remove the cover for later inspection of the inner concentric pipe.)

If the roof or wall is constructed of combustible material, use an approved thimble that provides a 2-inch air gap. If exiting through a roof, include a storm collar. All installations must be weatherized.



**Figure 5 - Attach field-supplied rigid bracing to support angles only**

### 4. Attach Vent Caps (Refer to Figure 6)

First, attach the 6" vent cap. Slide the vent cap over the end of the 4" pipe with the pipe extending through the cap. Secure the vent cap to the 6" pipe with at least three non-corrosive, evenly spaced screws.

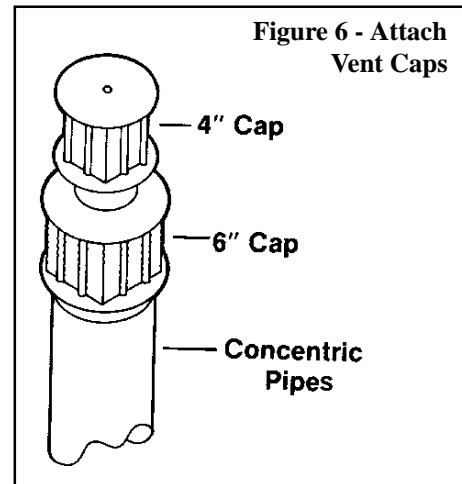
Second, attach the 4" vent cap and secure in the same way.

Using the tube of silicone rubber included in the option kit, seal the gap between the 4" vent pipe and top of the 6" vent cap.

### 5. Installation of the dual vent option is complete. Attach the 4" diameter vent runs from the heaters to the inlet collars on the dual vent adapter box. Secure with at least three evenly spaced, non-corrosive screws and seal the joints with aluminum or TEFLON® tape suitable for 550°F.

Support the vent runs; do not rely on the dual vent adapter box for their support.

Follow the instructions in the heater installation manual (Form RGM456 for Model TR/TR-H or Form RGM452 for Model TRP) to complete the installation.



**Figure 6 - Attach Vent Caps**

**Thomas & Betts**

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