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.

Form I-VR/TRPA-DV (3-16)
Obsoletes I-VR/TRPA-DV (4-15)

Option CC5 - Dual Vent Kit

Applies: **INFRA-REZ Heater Models VR, TRPA, TRP and TR/TR-H**

Description / Application

The dual vent option kit permits power venting of two of the INFRA-REZ heater 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.

Kit Components

Figure 1
Option CC5
Dual Vent Kit

Option CC5 Package - P/N 120736 includes:

Code	Qty	P/N	Description
1	1	120291	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

WARNING

Installation should be done be a qualified agency in accordance with these instructions and in compliance with all codes and requirements of authorities having jurisdiction. The qualified agency performing this work assumes responsibility for this installation.

Vent Length and Vent Pipe Requirements

References:

- **Model VR** - Refer to Heater Installation Form I-V/R, Paragraph 13.
- **Model TRPA** - Refer to Heater Installation Form I-TRPA, Paragraph 9.
- **Model TRP** - Refer to Heater Installation Form I-TRP, Paragraph 9.
- **Models TR/TR-H** - Refer to Heater Installation Form I-TR, Paragraph 11

Include the length of the concentric pipe and the equivalent for flow loss through the adapter box in the vent length of each heater. See the Vent Length Table, page 2 for Maximum length of the concentric portion of vent pipe is six feet (1.8M).

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

Vent Length Table Applies to INFRA-REZ Model 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 the maximum vent length.**

Vent Length Table for Model VR, TRPA, TRP, TR or TR-H with Option CC5 Dual Vent

Model	Input Size (000)	Straight Tube Lgth (ft)	Vent Diameter (inches)	Total Vent Length				Equivalent Length for:						Maximum Length of Concentric Pipes	
				Feet		Meters		90°Elbow		45°Elbow		Dual Vent Adapter Box*			
				Max	Min	Max	Min	ft	M	ft	M	ft	M	ft	M
VR	50	20, 25, 30, 35, 40	4	20	5	6.1	1.5	3	0.9	1.5	0.5	3	0.9	6	1.8
	75	20, 25	4	45	5	13.7	1.5	6	1.8	3	0.9	6	1.8	6	1.8
		30, 35		35	5	10.7	1.5	5	1.5	2.5	0.8	5	1.5	6	1.8
		40		20	5	6.1	1.5	3	0.9	1.5	0.5	3	0.9	6	1.8
	100	30, 35	4	45	5	13.7	1.5	6	1.8	3	0.9	6	1.8	6	1.8
		40, 45		35	5	10.7	1.5	5	1.5	2.5	0.8	5	1.5	6	1.8
		50		20	5	6.1	1.5	3	0.9	1.5	0.5	3	0.9	6	1.8
	125	30, 35, 40, 45, 50, 55, 60	4	60	5	18.3	1.5	12	3.7	6	1.8	12	3.7	6	1.8
	150	40, 45, 50, 55, 60	4	60	5	18.3	1.5	12	3.7	6	1.8	12	3.7	6	1.8
	175	40, 45, 50, 55, 60, 65, 70	4	60	5	18.3	1.5	12	3.7	6	1.8	12	3.7	6	1.8
	200	50, 55, 60, 65, 70	4	60	5	18.3	1.5	12	3.7	6	1.8	12	3.7	6	1.8
TRPA	30-60	N/A	4	40	5	12.2	1.5	6	1.8	3	0.9	6	1.8	6	1.8
TRP	30-100	N/A	4	40	5	12.2	1.5	6	1.8	3	0.9	6	1.8	6	1.8
TR / TR-H	50	20, 25, 30	4	20	5	6.1	1.5	3	0.9	1.5	0.5	3	0.9	6	1.8
	75	20, 25	4	45	5	13.7	1.5	6	1.8	3	0.9	6	1.8	6	1.8
		30, 35		35	5	10.7	1.5	5	1.5	2.5	0.8	5	1.5	6	1.8
		40		20	5	6.1	1.5	3	0.9	1.5	0.5	3	0.9	6	1.8
	100	30, 35	4	45	5	13.7	1.5	6	1.8	3	0.9	6	1.8	6	1.8
		40, 45		35	5	10.7	1.5	5	1.5	2.5	0.8	5	1.5	6	1.8
		50		20	5	6.1	1.5	3	0.9	1.5	0.5	3	0.9	6	1.8
	125	40, 45, 50	4	60	5	18.3	1.5	12	3.7	6	1.8	12	3.7	6	1.8
	150	50, 55, 60	4	60	5	18.3	1.5	12	3.7	6	1.8	12	3.7	6	1.8
	175	50, 55, 60, 65, 70	4	60	5	18.3	1.5	12	3.7	6	1.8	12	3.7	6	1.8
	200	50, 55, 60, 65, 70	4	60	5	18.3	1.5	12	3.7	6	1.8	12	3.7	6	1.8

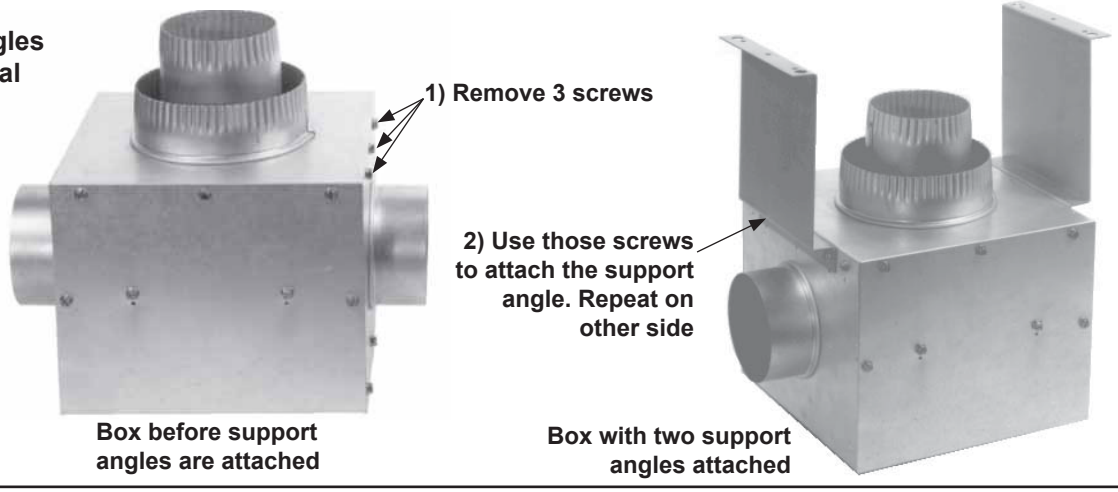
*** Must be deducted from the total vent length of EACH heater**

Installation Instructions

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.

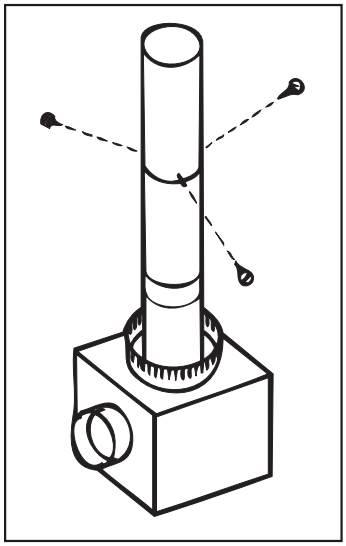
Figure 2
Attach support angles to inlet sides of dual vent adapter box



2. Attach Concentric Vent Pipes to Dual Vent Adapter Box

Attach the 4” diameter vent terminal pipe to the inner concentric 4” collar on the adapter box. See **Figure 3**. Secure with three non-corrosive screws spaced evenly around the pipe. Seal joint with aluminum tape suitable for 550°F (Option FA1, P/N 98266, or equivalent).

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



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" (305 mm) longer than the outer concentric pipe.

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.

3. Install the 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. The dual vent adapter box must be attached to the building to adequately support the weight of the adapter box plus the concentric pipes and the two vent caps. Following dimensions and clearance requirements in either **Figure 4A** or **4B** and in **Figure 5**, attach the field supplied rigid bracing

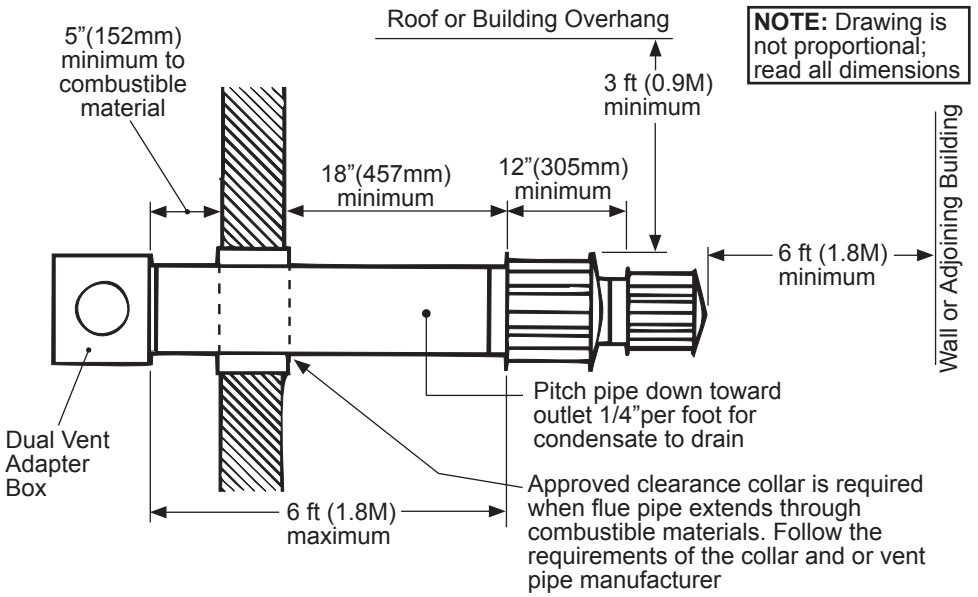


Figure 4A
Horizontal Dual Vent Terminal
Concentric vent pipes, 4" inner and 6" outer, are both single-wall vent pipe.

Maintain a clearance of 18 inches (457 mm) from the wall to the 6"vent terminal cap for stability under wind conditions.

Products of combustion can cause distortion of some building finishes and deterioration of masonry materials. Applying a clear silicone sealant that is normally used to protect concrete driveways can protect masonry materials. If discoloration is an esthetic problem, relocate the vent or install a vertical vent.

Horizontal Vent Clearance Table

Structure	Minimum Clearances for Vent Termination Location (all directions unless specified)
Forced air inlet within 10 ft (3.1 M)	3 ft (0.9 M) above *
Combustion air inlet of another appliance	6 ft (1.8 M)
Door, window or gravity air inlet (any building opening)	4 ft (1.2 M) horizontally
	4 ft (1.2 M) below
	1 ft (305 mm) above
Electric meter, gas meter ** and relief equipment	U.S. - 4 ft (1.2 M) horizontally Canada - 6 ft (1.8 M) horizontally
Gas regulator **	U.S. - 3 ft (0.9 M) Canada - 6 ft (1.8 M)
Adjoining building or wall	6 ft (1.8 M)
Adjacent public walkways	7 ft (2.1 M) above
Grade (ground level)	1 ft (305 mm) above
* If the heater is approved for installation with outside combustion air; see the heater installation manual (see References, page 1).	
** Do not terminate the vent directly above the gas meter or service regulator.	
The vent must be at least 6" (152 mm) higher than anticipated snow depth.	

Installation Instructions (cont'd)

Figure 4B
Vertical Dual Vent Terminal
Concentric vent pipes, 4" inner and 6" outer, are both single-wall vent pipe.

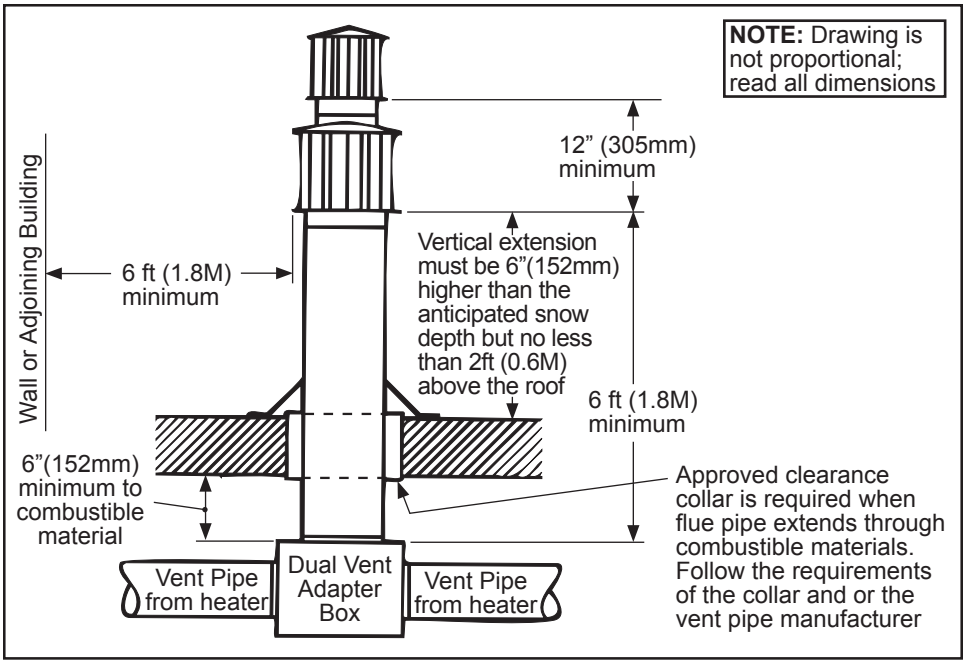
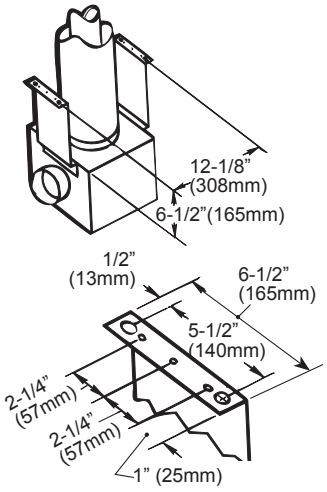


Figure 5
Attach field supplied rigid bracing to support angles only

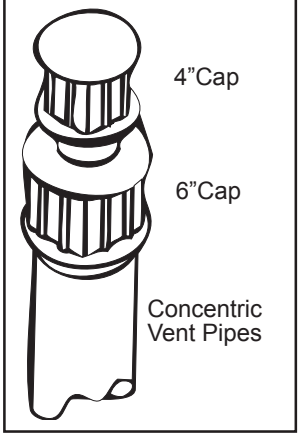


or supports to the metal support angles attached to the box in Step 1. Attach bracing or supports only at the support angles provided. (If the support is attached elsewhere to the adapter box, it may be impossible to remove the cover for later inspection of the inner concentric pipe).

If the roof or wall is constructed of combustible material, use an approved metal collar. If exiting through a roof, include a storm collar. All installations must be weatherized.

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 manner.
   Third, using the tube of silicone rubber included in the option kit, seal the gap between the 4"vent pipe and the top of the 6"vent cap.
5. **Installation of the dual vent cap 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 sealant or aluminum 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 to complete the installation.

Figure 6
Attach Vent Caps



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