

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.

REZNOR *Thomas&Betts*



COMBUSTION AIR INLET KIT, OPTION DE2

Installation Form RGM 456-OA

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

Description/Application

An optional combustion air inlet kit is required when the application requires combustion air from outside the building. Outside combustion air should be supplied (1) if the building atmosphere has negative pressure; (2) if the building atmosphere is dirty or dusty; (3) if the building atmosphere contains substances that will cause toxic gas when combined with flame or flue products; or (4) if the heater is being installed in a tightly closed room that does not provide required air for combustion.

Do not install outside combustion air inlet on an unvented heater.

The kit includes an expandable, 4"-diameter pipe, connecting hardware, and the inlet terminal cap. This flexible section of pipe connects directly to the combustion air inlet on the burner/control box and extends a maximum of three feet. The 4"-diameter pipe between the expandable pipe and the terminal cap is field-supplied.

Option DE2, Package P/N 120724, includes:

Code	Qty	P/N	Description
1	1	120729	Flexible Combustion Air Inlet Pipe, 4" diameter
2	2	120716	Clamp, Worm Drive, 1/2", Stainless Steel
3	1	120426	Inlet Cap, 4"

Figure 1 - Option DE2 Components



Installation Requirements/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.

The maximum length of the inlet air must not exceed the length shown in the Table below. Use only the inlet cap included in the option package. A different combustion air inlet cap could cause nuisance problems and/or unsafe operating conditions. Use care in selecting the location of the air inlet cap. If the inlet cap is located adjacent to the exhaust terminal, the terminals must be separated by a minimum distance of three feet. The only exception is when the air inlet is located directly below a horizontal vent cap. The required clearance between an air inlet terminal located directly below the vent cap is 18 inches. See requirements in Figures 2A and 2B on page 2.

Combustion Air Inlet Length Table

Type of Inlet Pipe	BTUH Size	Straight Tube Length	Maximum Length	Equivalent Length for	
				90° Elbow	45° Elbow
Smooth ¹ Wall	50	20/25/30	80 ft	10 ft	5 ft
	75	20/25/30/35/40			
	100	30/35/40/45/50			
	125	40/45/50	60 ft	10 ft	5 ft
	150	50/55/60			
	175	50/55/60/65/70			
200	50/55/60/65/70				
Corrugated or Flexible	50	20/25/30	40 ft	N/A	N/A
	75	20/25/30/35/40			
	100	30/35/40/45/50			
	125	40/45/50	30 ft	N/A	N/A
	150	50/55/60			
	175	50/55/60/65/70			
200	50/55/60/65/70				

¹ Assumes the use of three feet of flexible pipe at the combustion air inlet on the burner/control box.

Installation Instructions - Read all instructions before proceeding; do steps in order that best suits the installation.

WARNING: If the heater is installed, turn off the gas and electric power before installing the optional combustion air inlet kit.

1. Air Inlet Terminal - Install the outside terminal portion of the air inlet. See requirements for a vertical vent in the illustration in Figure 2A or horizontal vent in Figure 2B.

Figure 2A - Vertical Vent Terminal/Air Inlet Arrangements with Single-Wall or Double-Wall Vent Terminal

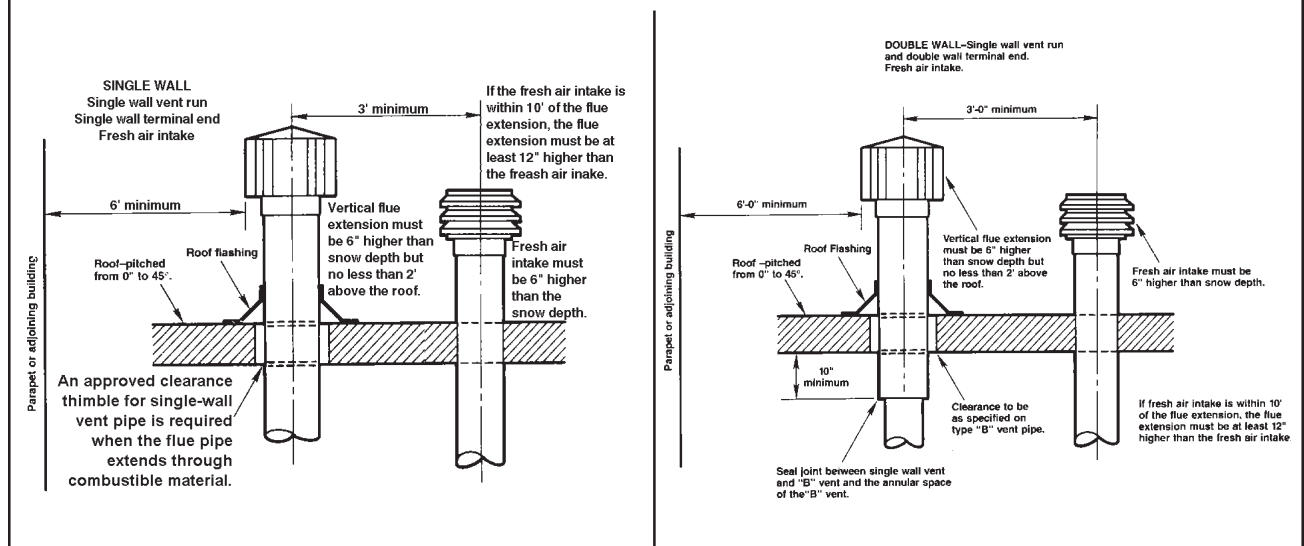
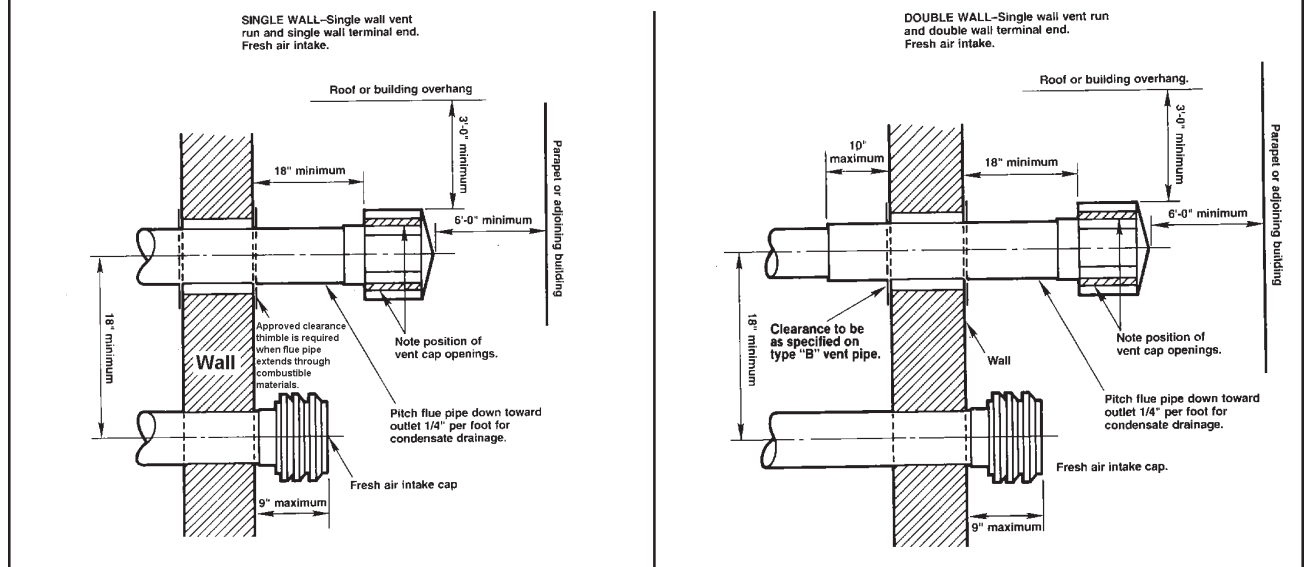


Figure 2B - Horizontal Vent Terminal/Air Inlet Arrangements Single-Wall or Double-Wall Vent Terminal



2. Install the Inlet Air Pipe (field-supplied) - Install the inlet air pipe from the outside terminal to within a maximum of three feet of the burner/control box. If the inlet air pipe passes through a moisture-laden air, insulation or double-wall tubing may be needed to prevent condensation on the outside of the pipe. The maximum length of the inlet pipe must not exceed the length shown in the Combustion Air Inlet Length Table on page 1.

Provide adequate support for the pipe.

3. Install Expandable Pipe - Use one clamp to attach the expandable pipe to the air inlet cover on the burner/control box.

Use the other clamp to attach the expandable pipe to the field-supplied piping that extends to the outside air inlet terminal. Do not extend the expandable pipe more than three feet as it must be able to expand and contract with the heater.

Thomas & Betts

©1999 Thomas & Betts Corporation, All rights reserved.

Printed in the U.S.A.

MANUFACTURER OF GAS, OIL, ELECTRIC HEATING AND VENTILATING SYSTEMS
11/99 2M YL Form 456-OA (Version .4)