

HAZARD INTENSITY LEVELS

1. **DANGER:** Failure to comply will result in severe personal injury or death and/or property damage.
2. **WARNING:** Failure to comply could result in severe personal injury or death and/or property damage.
3. **CAUTION:** Failure to comply could result in minor personal injury and/or property damage.

REZNOR®

OPTION CD8 Polytube Adapter for Blower-Type Unit Installed at Floor Level

INSTALLATION FORM RZ-NAI-B-PF
Obsoletes RGM 434/436-PF (Version A.3)

APPLIES TO: Models B and BE

OPTION DESCRIPTION AND APPLICATION

The polytube adapter option for units installed at floor level not only adapts blower-type heaters (Sizes 75-400) for use with polytube duct-work but also includes two sets of legs for floor mounting. This option is especially designed for use in the greenhouse industry to provide tempered air at the level where it is most needed. The polytube adapter is installed on the front of the heater and is equipped with a collar for attaching the field-supplied polytube.

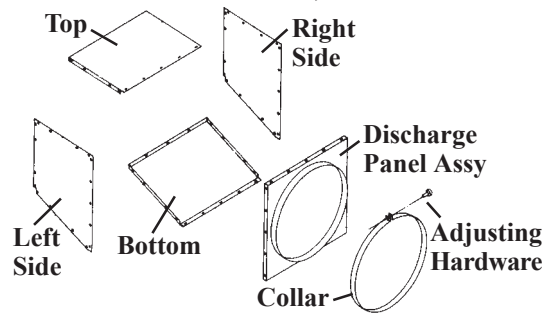
WARNING

Floor-mounted units should not be installed in areas accessible to non-service personnel. Various areas of the heater have hot surfaces as well as the flue gas vent system, which can cause severe burns. Optional belt and blower guards (Option AZ6 or CD10) are required.

The option package includes:	75		100		125		130		165		200		250-300		400	
	Qty	P/N	Qty	P/N	Qty	P/N	Qty	P/N	Qty	P/N	Qty	P/N	Qty	P/N	Qty	P/N
Option CD8 - Pkg P/N		101680		101681		137300		122160		101682		101683		101684		101685
Adapter Side	1	101253	1	101253	1	132066	1	101254	1	101254	1	101254	1	101255	1	101254
Adapter Side	1	101259	1	101259	1	132066	1	101260	1	101260	1	101260	1	101255	1	101260
Adapter Top	1	101266	1	101267	1	132061	1	121548	1	101268	1	101269	1	101270	1	101271
Adapter Bottom	1	101272	1	101273	1	132062	1	121547	1	101274	1	101275	1	101276	1	101277
Discharge Panel Assy	1	101249	1	101249	1	101249	1	101250	1	101250	1	101250	1	101250	1	101250
Discharge Collar Band	1	101499	1	101499	1	101499	1	146463	1	146463	1	146463	1	146463	1	146463
Label	1	101263	1	101263	1	101263	1	101263	1	101263	1	101263	1	101263	1	101263
Adapter Legs	2	101692	2	101692	2	101692	2	101692	2	101692	2	101692	2	101692	2	101692
Blower Support Assy	1	101686	1	101686	1	101686	1	101686	1	101686	1	101686	1	101686	1	101686
Support Angles	2	101691	2	101691	2	101691	2	101691	2	101691	2	101691	2	101691	2	101691
Blower Legs	2	101689	2	101689	2	101689	2	101689	2	101689	2	101689	2	101689	2	101689
Cross Support Brace	1	101690	1	101690	1	101690	1	101690	1	101690	1	101690	1	101690	1	101690
Parts Bag*	1	101693	1	101693	1	101693	1	101693	1	101693	1	101693	1	101693	1	101693

* Parts Bag includes: **56 - P/N 11813**, sheetmetal screws #10x1/2" long; **1 - P/N 51231**, 1/4-20 x 1-1/2 hex head screw; **2 - P/N 16246**, hex head screw #1/4-20 x 3/4" long; **3 - P/N 7328**, hex nuts #1/4-20; **1 - P/N 107246**, wing nut #1/4-20

Figure 1 - Polytube Adapter Parts Only in Option CD8 (parts to floor mount are not included in this illustration)



DIMENSIONS OF POLYTUBE ADAPTER (inches)

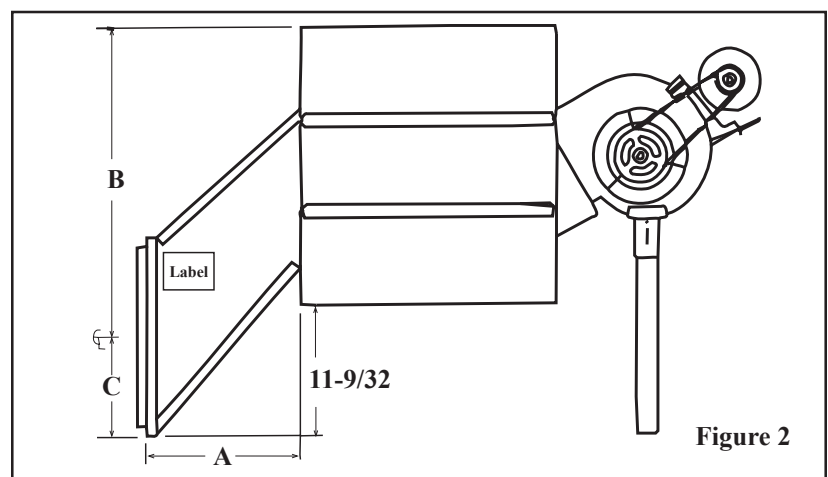


Figure 2

Size	75	100	125	130	165	200	250 / 300	400
A	16-7/32	16-13/32	16-11/16	16-1/32	16	16-9/16	16-3/4	16-7/32
B	30-7/32	30-7/32	30-7/32	37-7/32	37-7/32	37-7/32	37-7/32	37-7/32
C	10-3/8	10-3/8	10-3/8	13-3/8	13-3/8	13-3/8	13-3/8	13-3/8

DANGER

When a unit is installed on the floor, caution must be taken as to location to prevent any damage to controls or contact with any moving parts. Clearances to combustibles must be strictly observed. Liquids should never be allowed to be sprayed, poured, or spilled on the heater controls.

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.

INSTALLATION INSTRUCTIONS

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

Set the heater on a wooden pallet or other substantial material so that the heater is at least 13 inches off the floor. Check the heater with a level and make any adjustments to assure that the heater is level before beginning installation. **The heater must be level when the blower legs are attached.**

1. Remove the Horizontal Louver Assembly (See Figure 3)

Remove the screws that attach the sides of the horizontal louver assembly to the inner side panels of the heater.

Remove the louver assembly.

2. Install the Adapter Sides (See Figure 4)

Before attaching the side panels, determine their correct positioning depending on the desired configuration.

Using the holes that held the louver assembly, attach the adapter side panels to the heater. At the remaining hole locations (pre-punched in the adapter sides), drill 3/32" diameter holes. Insert screws and tighten.

Figure 3 - Blower-Type Unit Heater with Standard Horizontal Louver Assembly (Remove Louver Assembly to Install Polytube Adapter)

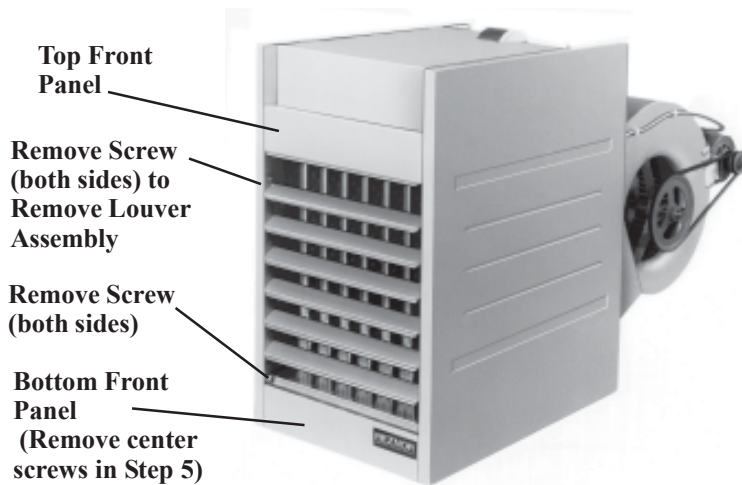
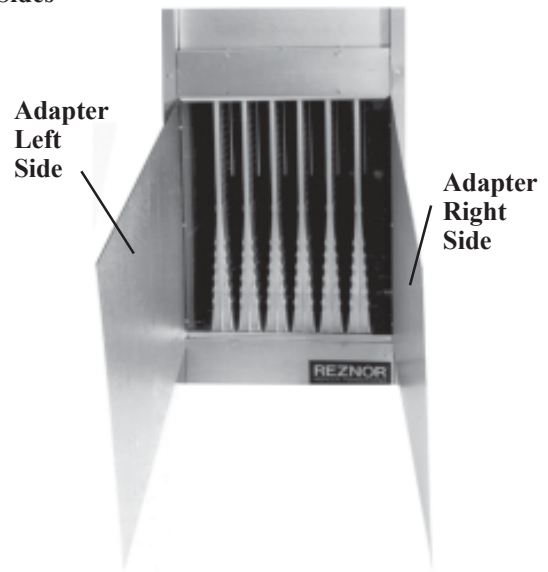


Figure 4 - Attach Polytube Adapter Sides



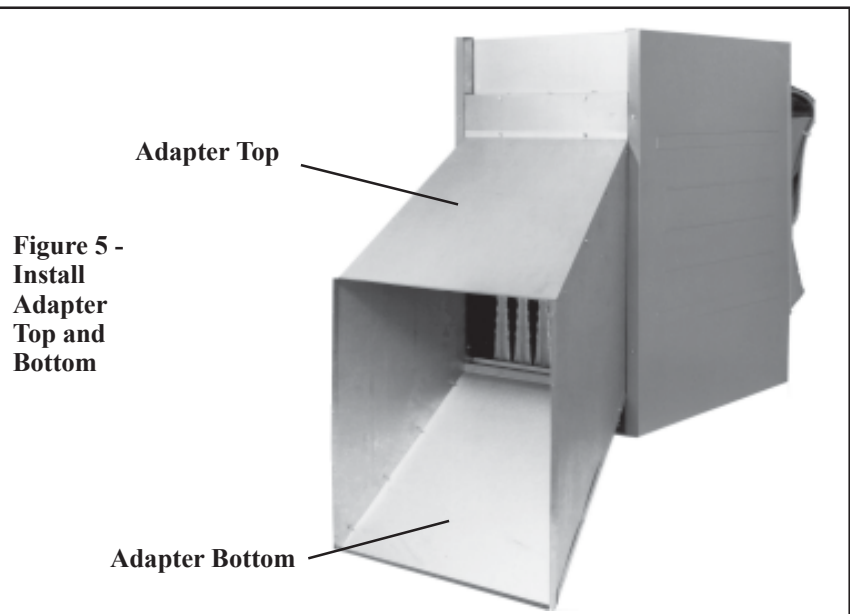
3. Install Adapter Top and Bottom (See Figure 5)

Determine which of the two remaining panels goes on the top and which goes on the bottom.

Adapter Top - Position the adapter top panel with the flange of the top **over** the adapter sides. Attach the top to the front of the heater and to the adapter side panels.

Adapter Bottom - Remove the screws in the bottom front panel of the heater. (Use these screws when attaching the adapter bottom to the front of the heater.)

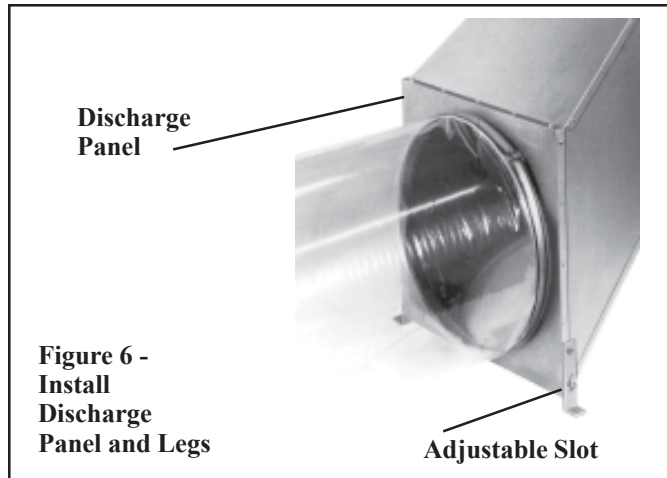
Position the adapter bottom panel with the flange of the bottom **over** the side panels. Attach the adapter bottom to the front of the heater and to the adapter side panels.



4. Install Adapter Discharge Panel and Legs (See Figure 6)

Slide the discharge panel over the front of the "box" formed by the sides, top, and bottom adapter panels. Attach at all of the holes across the top and the bottom. On the sides, attach at all of the holes except the bottom one on each side.

Attach the adapter legs to the sides of the discharge panel at each bottom corner. Use the adjustable slot on the legs.



5. Install Blower Legs (See Figure 7)

1) Assemble the Support Angles ("L" shaped brackets) and the Blower Support

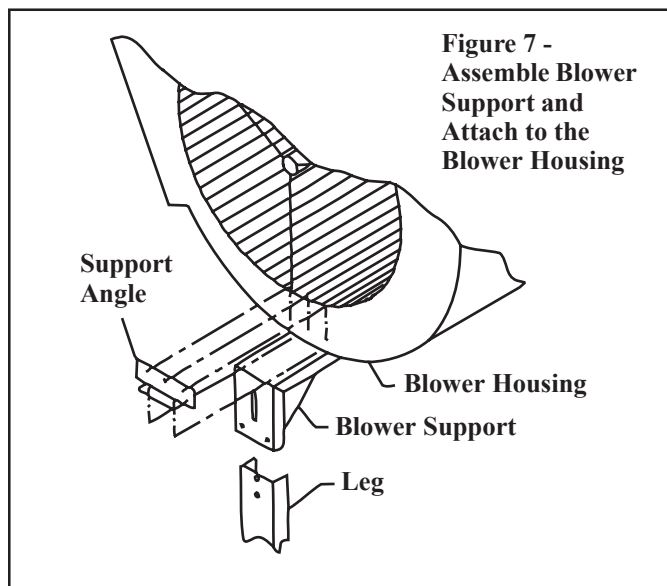
Determine where to attach the brackets by centering the blower on the blower support. (Holes are provided for all sizes.) Position the support angles so that they will be flat against the sides of the blower housing. Attach the angles to the support.

2) Attach the Assembled Blower Support

The blower support should be attached horizontally across the lowest point of the blower housing. Using a level, determine the correct placement. Mark and drill 1/8" diameter holes in the blower housing sides and attach the angle supports.

3) Attach the Legs

Using the slotted hole only, attach the legs to the blower support. Use the two nuts and bolts in the hardware bag.

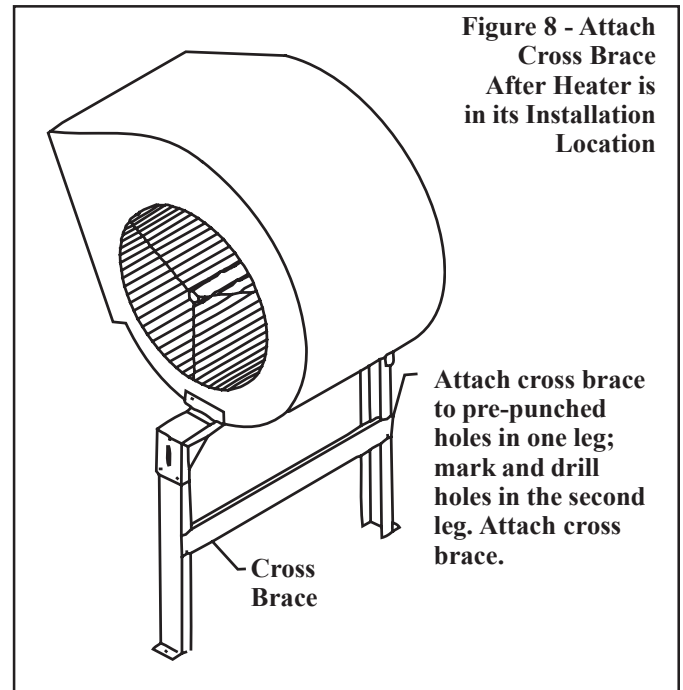


INSTALLATION NOTE: Do not install the cross brace on the legs until after the heater is in the position where it is being installed.

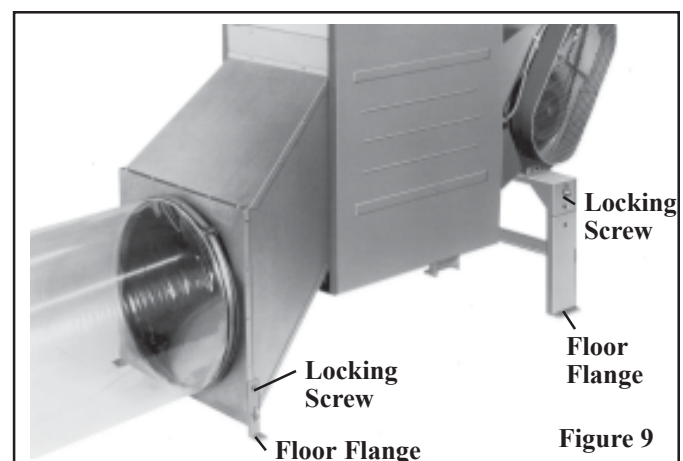
6. Level and Mount the Heater (See Figure 8)

Position the heater at the place of installation. **IMPORTANT:** Heater must be placed on a solid surface such as concrete or asphalt. With a level, check the heater in all directions (front to rear and side to side). Level by adjusting the bolts in the slots in the blower legs and the screws in the slots in the adapter legs.

After the heater is level, attach the cross brace to the blower leg with the pre-punched holes. Position the cross brace on the second leg and mark the holes. Drill 5/32" diameter holes and attach the cross brace.



Verify again to be sure that the heater is level. Insert the locking screws in the blower legs. Drill 1/8" diameter holes in the adapter side and insert locking screws in the adapter legs.



Using the floor flanges on all four of the legs, attach the heater to the floor.

WARNING: Whether finalizing installation now or at some future time, be sure to install locking screws in both the blower legs and the adapter legs. The heater must be on a solid surface and remain level.

INSTALLATION INSTRUCTIONS (cont'd)

7. Install Polytube (See Figure 9)

The polytube adapter is now completed and ready for the field-supplied polytube. Slip the end of the polytube over the collar under the tightening band. Be sure that the air delivery holes are pointed in the proper direction. Fasten the band over the polytube by tightening the adjusting screw.

Polytubes are normally supplied as a tube which is open at both ends. The end opposite the heater must be closed to permit the tube to inflate.

For greenhouse floor-mounted installations, the polytube is usually allowed to rest on the floor underneath the grow tables.

8. Attach Label

For future reference, attach the "Polytube Holes Location" label on the side panel of the adapter. (See recommended location in the Dimension Drawing on page 1.) Wipe the surface of the panel with a clean dry cloth. Remove the backing from the label and adhere it to the adapter.

9. Installation Checks

When the installation is completed, the motor load and discharge air temperature should be checked. Consult the installation manual supplied with the heater for information on checking motor load and how to make blower speed adjustments.

Use a temperature measuring device to check the discharge air temperature.

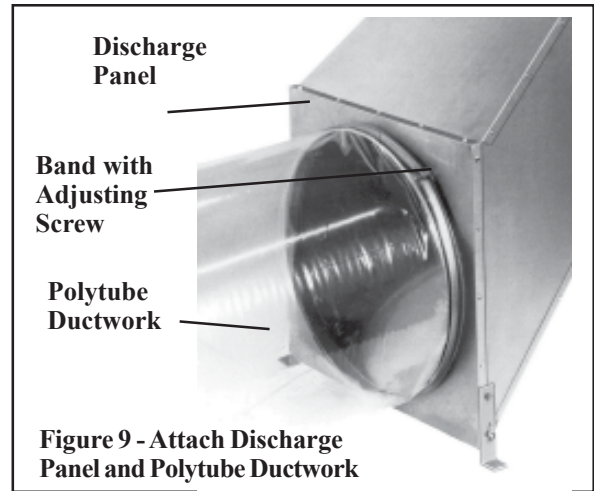


Figure 9 - Attach Discharge Panel and Polytube Ductwork

Check the air temperature at a location in the tube, six to eight feet way from the heater. A temperature rise range of 55° to 65° F is recommended. Following the instructions in the heater manual, adjust the speed of the blower to achieve the desired range while maintaining motor current draw below the full load amperes shown on the motor rating plate.

POLYTUBE SELECTION - Polytube selection is the responsibility of the installer. Different grades, hole positions, hole sizes, and lengths are available. Some local code authorities require that polytube material be a listed material. Consult code authority having jurisdiction and polytube supplier to determine the appropriate polytube material and recommended methods of suspension. Poly tubing can be obtained from a supply distributor such as FOF Products, Inc., P. O. Box E, 1505 Racine Street, Delavan, WI 53005; Acme Engineering company, P. O. Box 978, Muskogee, OK 74402; or any local greenhouse supply distributor.

The total open or free area of the polytube is important. Polytube suppliers have a great deal of flexibility in placement and sizing of holes. Too small of a free area will cause overheating. Excessive open area may not permit the tube to inflate. See the table below for a guide in hole size and location. **Spacing and hole size may be varied, but free area must not be less than shown for your heater size.**

Size	CFM at .25" ESP	Polytube Diameter (inches)	Minimum Free Area (square Inches)	Suggested Hole Sizes and Locations					
				Holes	Length of Polytube				
					50 Ft	75 Ft	100 Ft	125 Ft	150 Ft
75	925	18	110	Number	37 pairs	75 pairs	75 pairs		
				Diameter	1-1/2"	1"	1"		
				Spacing	16"	12"	16"		
100	1235	18	145	Number	50 pairs	50 pairs	100 pairs	94 pairs	
				Diameter	1-1/2"	1-1/2"	1"	1"	
				Spacing	12"	18"	12"	16"	
125	1540	18	185	Number	40 pairs	60 pairs	60 pairs	125 pairs	
				Diameter	1-7/8"	1-1/2"	1-1/2"	1"	
				Spacing	15"	15"	20"	12"	
130	1600	24	190	Number	40 pairs	60 pairs	60 pairs	125 pairs	
				Diameter	1-7/8"	1-1/2"	1-1/2"	1"	
				Spacing	15"	15"	20"	12"	
165	2035	24	240	Number	50 pairs	50 pairs	75 pairs	75 pairs	75 pairs
				Diameter	1-7/8"	1-7/8"	1-1/2"	1-1/2"	1-1/2"
				Spacing	12"	18"	16"	20"	24"
200	2465	24	300	Number	42 pairs	42 pairs	60 pairs	60 pairs	100 pairs
				Diameter	2-1/4"	2-1/4"	1-7/8"	1-7/8"	1-1/2"
				Spacing	14"	21"	20"	25"	18"
250	3085	24	360	Number	40 pairs	60 pairs	60 pairs	60 pairs	60 pairs
				Diameter	2-1/2"	2"	2"	2"	2"
				Spacing	15"	15"	20"	25"	30"
300	3700	24	425	Number	75 pairs	75 pairs	75 pairs	75 pairs	75 pairs
				Diameter	2"	2"	2"	2"	2"
				Spacing	9"	12"	16"	20"	24"
400	4935	24	550	Number	60 pairs	60 pairs	60 pairs	100 pairs	100 pairs
				Diameter	2-1/2"	2-1/2"	2-1/2"	1-7/8"	1-7/8"
				Spacing	10"	15"	20"	15"	18"

Conversion Table (Diameter to Area)	
Diameter of the Hole (inches)	Area of the Hole (square inches)
2-1/2	4.91
2-1/4	3.98
2	3.14
1-7/8	2.76
1-1/2	1.76
1	0.785

WARNING: Optional polytube adapters are to be used only on units equipped with a blower. At no time should the free area in the polytube be less than the listed minimum. Failure to comply with this warning could result in severe personal injury, death, and/or property damage.

(800) 695-1901, www.RezSpec.com

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