

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.



**OPTIONS CD2, CD3, & CD4
DOWNTURN AIR NOZZLES**

INSTALLATION FORM RGM 432/433-DN

APPLIES TO: Models FT and SFT

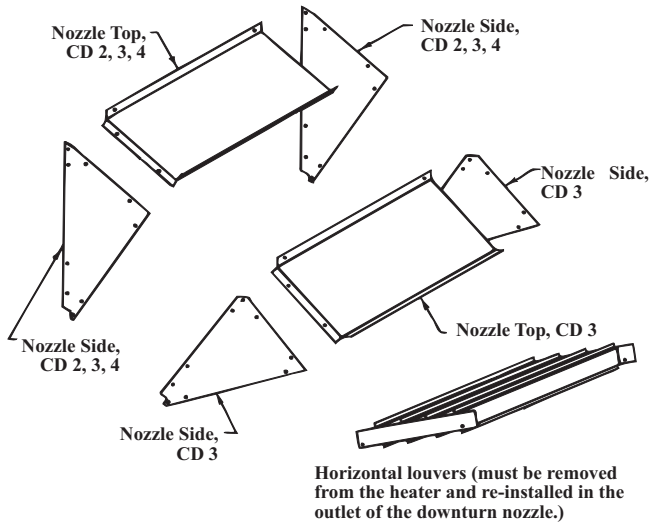
Description/Application

Downturn nozzles are designed to direct the discharge air in a more vertical flow. These downturn nozzle packages apply to Reznor® Models FT and SFT only.

The option packages include:

Model →	FT		SFT		FT and SFT							
Size →	75		75		100	125	150	200	250	300		
Option CD2 Package P/N →	160826		160827		160828	160829	160830	160831	160832	160833		
Components:	Qty	P/N	Qty	P/N	Qty	P/N	Qty	P/N	Qty	P/N	Qty	P/N
Nozzle Side	2	149578	2	159059	2	159063	2	159060	2	159067	2	159065
Nozzle Top	1	149580	1	149580	1	159062	1	159062	1	159066	1	159068
Bag Assembly (P/N 160814) including:												
#10-16 x 1/2" long screw	20	149563	20	149563	20	149563	20	149563	20	149563	20	149563
Installation Instructions	1	160808	1	160808	1	160808	1	160808	1	160808	1	160808
Option CD3 Package P/N →	160834		160835		160836	160837	160838	160839	160840	160841		
Components:	Qty	P/N	Qty	P/N	Qty	P/N	Qty	P/N	Qty	P/N	Qty	P/N
Nozzle Side	4	149578	4	159059	4	159063	4	159060	4	159067	4	159065
Nozzle Top	2	149580	2	149580	2	159062	2	159062	2	159066	2	159068
Bag Assembly (P/N 160815) including:												
#10-16 x 1/2" long screw	34	149563	34	149563	34	149563	34	149563	34	149563	34	149563
Installation Instructions	1	160808	1	160808	1	160808	1	160808	1	160808	1	160808
Option CD4 Package P/N →	160842		160843		160844	160845	160846	160847	160848	160849		
Components:	Qty	P/N	Qty	P/N	Qty	P/N	Qty	P/N	Qty	P/N	Qty	P/N
Nozzle Side	2	149578	2	159059	2	159063	2	159060	2	159067	2	159065
Nozzle Top	1	149580	1	149580	1	159062	1	159062	1	159066	1	159068
Vertical Louver Top/Bottom Member	2	159443	2	159443	2	159444	2	159444	2	159444	2	159445
Vertical Louver	4	160504	4	160501	6	160501	6	160502	6	160503	10	160503
Nozzle Angle Clip	2	149581	2	149581	2	159061	2	159061	2	159064	2	159064
Bag Assembly (P/N 160816) including:												
#10-16 x 1/2" long screw	44	149563	44	149563	44	149563	44	149563	44	149563	44	149563
Installation Instructions	1	160808	1	160808	1	160808	1	160808	1	160808	1	160808

Figure 1 - Downturn Nozzle Parts and Dimensions



Outlet Nozzle Option CD2 and CD4 with 25°-65° Range of Air Deflection

Models	Sizes	"A"
FT/SFT	75, 100, & 125	9-1/16"
FT/SFT	150, 200, 250, & 300	13-1/4"

Outlet Nozzle Option CD3 with 50°-90° Range of Air Deflection

Models	Sizes	"A"
FT/SFT	75, 100, & 125	15-11/16"
FT/SFT	150, 200, 250, & 300	22-7/8"

Installation Instructions

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

Follow the instructions in the appropriate Section(s) for the option package being installed:

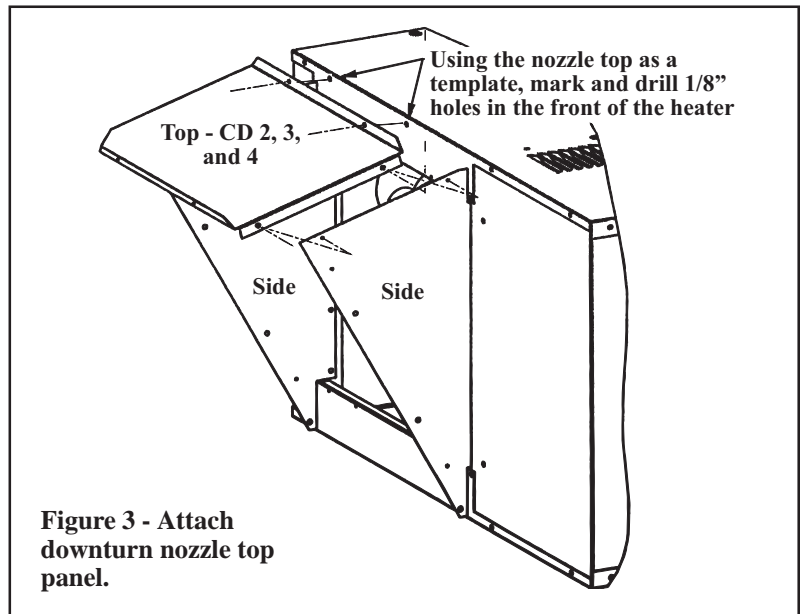
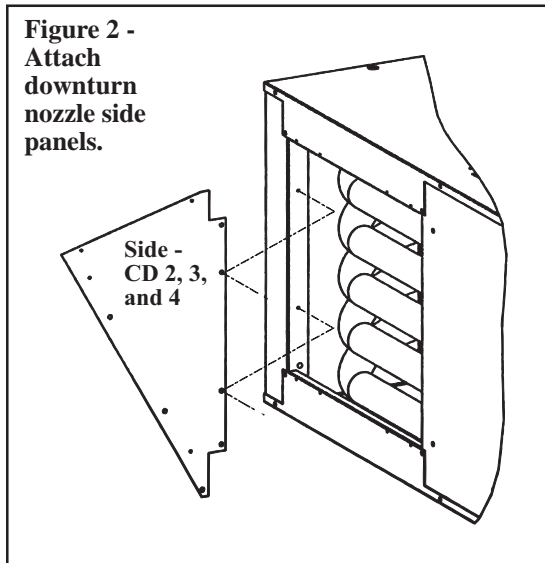
<u>Option Package</u>	<u>Instructions</u>
Options CD2 or CD3	Section A
Options CD4	Sections A and B

Tools Required: Drill, 1/8" Drill Bit, Phillips Screwdriver

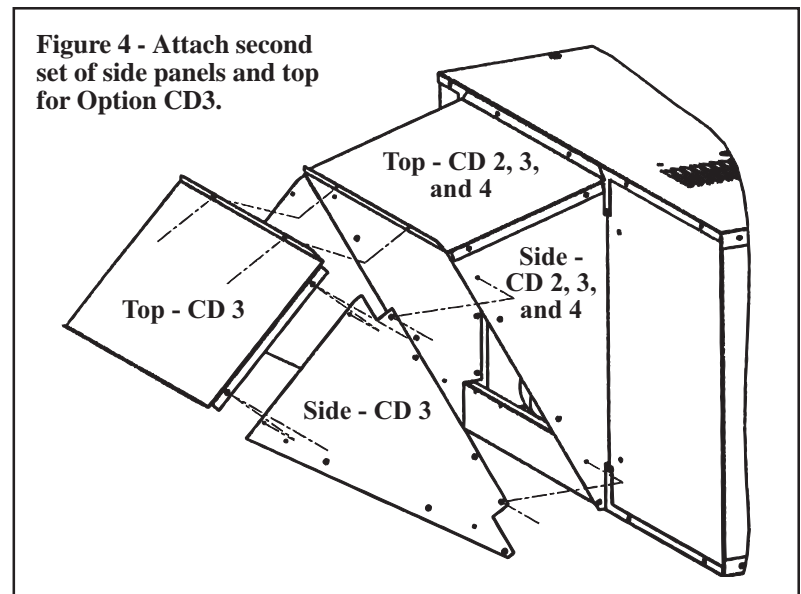
INSTALLATION NOTE: Wherever possible, always insert screws with pointed ends inside the nozzle.

SECTION A

1. If the heater is installed, turn off the gas and the electric power.
2. **Remove the Horizontal Louver Assembly** - Remove the horizontal louver assembly that is factory-installed in the front of the heater (screws are on the sides). Save the screws and the louver assembly. This louver assembly will be re-inserted in the outlet of the downturn nozzle.
3. **Install the Downturn Nozzle Side Panels** (See **Figure 2.**) - Use the same holes and the screws that held the louver assembly (removed in Step 2) to attach the side panels of the downturn nozzle.



5. **If installing Option CD3** (nozzles with two sets of side panels and two tops), attach the two additional nozzle side panels to the side panels already installed. Attach the additional top to the new sides and the top installed in Step No. 4. (See **Figure 4.**)



4. **Attach the Downturn Nozzle Top Panel** (See **Figure 3.**) - Using the nozzle top panel as a template, mark and drill a series of 1/8" holes in the front of the heater. Using the screws in the kit, attach the nozzle top to the front of the heater and to the nozzle sides.

6. **Re-Install the Horizontal Louver Assembly** - Attach the horizontal louver assembly removed from the front of the heater to the side panels at the outlet of the downturn nozzle. Adjust the louvers to obtain the desired air deflection.

CAUTION: To avoid getting burned, adjust the louvers while the heater is not in operation. If adjustment is required after the heater is in operation, wear protective gloves.

7. Installation of Option CD2 or CD3 is complete. **If you are installing Option CD4**, follow the instructions in Section B to add the vertical louvers.

√If option installation is complete and the heater is installed, be sure that it is level. Turn on the electrical power and the gas. Light the heater, following the lighting instructions.

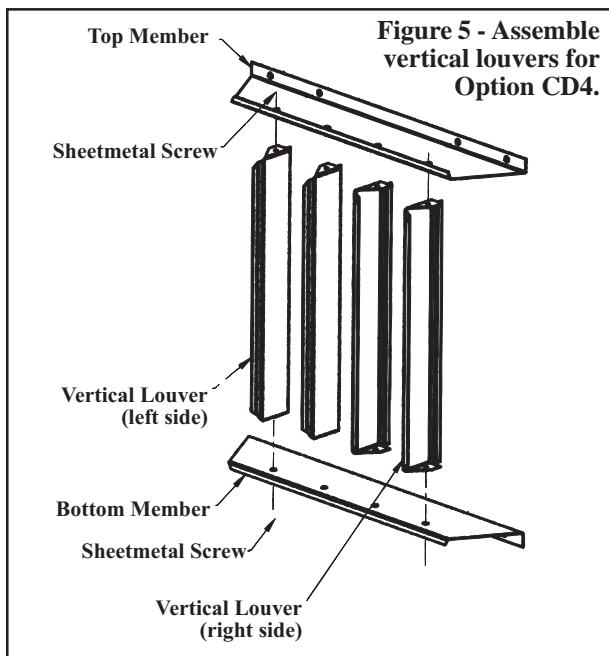
√If option installation is complete and the heater is not installed, follow the instructions in the heater installation/operation manual to complete the installation.

SECTION B

Additional Instructions for Installing Vertical Louvers in Option CD4

Follow the instructions that apply to your application for installing the downturn nozzle. If the heater is installed, do not re-light until after the vertical louvers have been added.

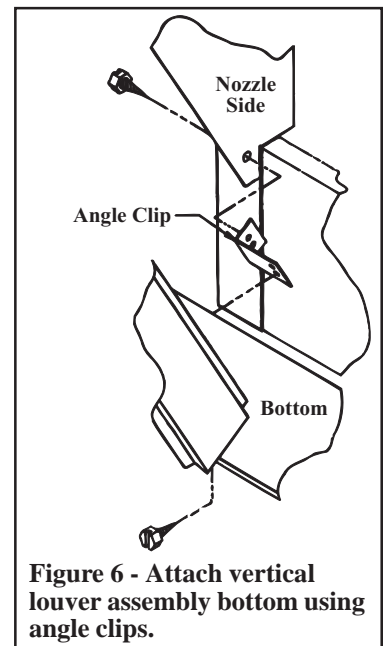
1. **Assemble the Louvers** - Assemble vertical louvers to the top and bottom members using the sheet metal screws provided. (See Figure 5.)
 - a. Vertical louver edges should extend beyond the front outer end of the louver top and bottom members.
 - b. Stops are designed so that the right half of the louvers turn right and the left half of the louvers turn left.



2. **Attach the Vertical Louver Assembly** - Screw the top member of the assembled vertical louvers to the top of the downturn nozzle.

3. **Install Angle Clips (See Figure 6)** - To attach the bottom of the vertical louver assembly, use the angle clips in the option package.

Attach the angle clips to the nozzle sides and to the bottom member of the louver assembly as shown in the illustration.



4. Installation is complete.

CAUTION: To avoid getting burned, adjust the louvers while the heater is not in operation. If adjustment is required after the heater is in operation, wear protective gloves.

√If the heater is installed, be sure that it is level. Turn on the electrical power and the gas. Light the heater, following the lighting instructions.

√If the heater is not installed, follow the instructions in the heater installation/operation manual to complete the installation.

Thomas & Betts



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MANUFACTURER OF GAS, OIL, ELECTRIC HEATING AND VENTILATING SYSTEMS

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12/00 Form RGM 432/433-DN (Version .1)