

Air Flow Specifications 4" Round Duct

UL 2158A Rated-Max temp rating 285° F, Max Static 1.0 in.

Heat Range Configuration	Min Total CFM	Max Total CFM	Min # Supply Runs	Single 4" Round Duct			Average all 4" Round Ducts Combined		
				Max Length Supply Runs	Max 45° Bends	Max 90° Bends	Max Avg. Length of Runs	Max 45° Bends	Max 90° Bends
1800 Watt	120	300	3	25 Ft	2	1	15 Ft	6	3
3750 Watts	180	400	5	25 ft	2	1	15 Ft	10	5
5000 Watts	240	500	6	25 ft	2	1	15 Ft	12	6

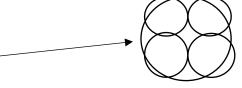
^{*} Most important thing to remember is that because our Electric Heaters are UL listed the discharge air temp is closely monitored (RV Gas Furnaces are NOT UL Listed). To meet these UL requirements and still generate a maximum heat output there are some air flow minimums that need to be meet.

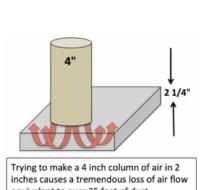
Airflow Minimums

- 1800 Watts ----- 35 Sq. inches of free space through the ducting.
- 3750 Watts ----- 55 Sq. inches of free space through the ducting.
- 5000 Watts ----- 75 Sq. inches of free space through the ducting.

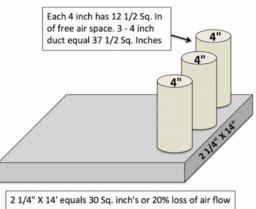
Ducting Spec's

One 4 inch round duct has 12 ½ Sq. inches of free air One 2 inch Sound dust has 3 ¼ Sq. inches of free air It takes four 2 inch ducts to equal one 4 inch duct

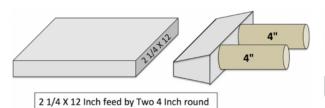




equivalent to over 25 feet of duct



This example is WRONG as you can see it offers significant air flow of 35% due to back pressure.



2 1/4 X 20 Inch feed by Three 4 Inch round

This example is CORRECT as you can see it offers no restriction to air flow, plus the free air of the round duct matches that of the rectangle duct.

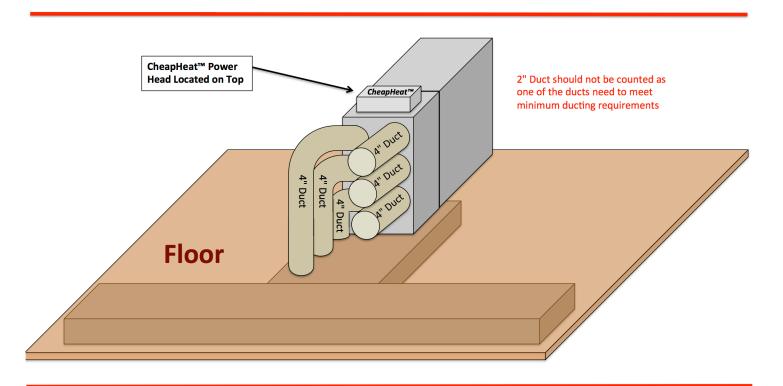
^{**} If you don't maintain these minimums the heater will short cycle and you will lose 30% to 35% heat it should produce.

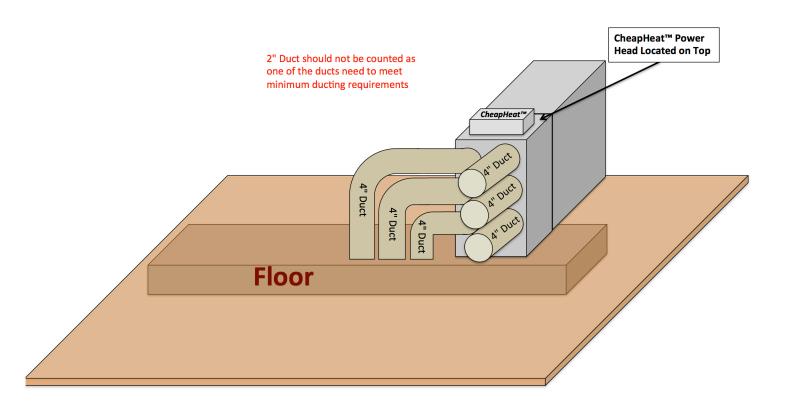




Options for modifying duct work in an Suburban SF/SH and Atwood 8900 Series vertical mount furnace with a bottom discharge VERTICAL REQUIRES TOD TO 200 F DEGREES TO PREVENT SHORT CYCLING

Note: Each 4 inch round duct is equivalent to 12 1/2" area of free air flow. So when your feeding duct work into the rectangle duct under the floor make sure you have provided enough square inches of air from to match the square inches of area in the duct your feeding.





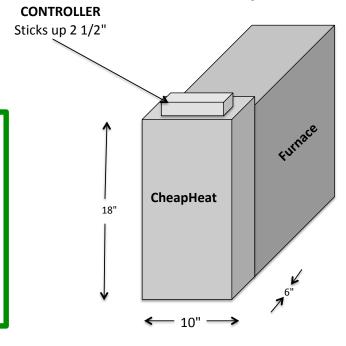


RVcomfortSystems LLC.

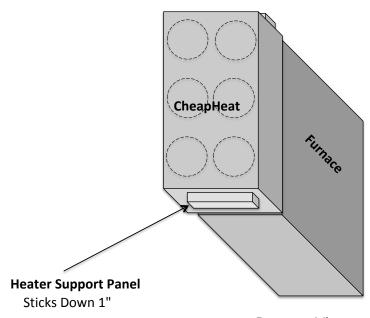
www.rvcomfortsystems.com

** End Clearance**

Don't to be sure you have enough clearance off of the end of the cabinet adapter (minimum of 6") to reconnect the all of the 4 " ducts. Remember all of those duct MUST be moved to the end of the cabinet so the air flows across the heater coil before it goes out to heat the coach,



Top View



Bottom View

Atwood 8900 Service Vertical Clearance need for CheapHeat