

Commonly Asked Questions:

Q. Will the room heat up faster if I put the thermostat on 90 degrees when I get home?

A. No. The thermostat is just an on-off switch that is temperature sensitive. The heater is either on or off.

Q. My baseboards are on outside walls, should fan heaters be also?

A. No. A fan heater, recessed into an outside wall, will create extra heat loss and air leakage for that room. An inside wall, facing a cold window, is the best location.

Q. My thermostat is above my fan-heater. Why?

A. The fan heater blows warm air away from itself and into the room. By the time the warm air has recirculated and reached the thermostat above the heater, a comfortable room temperature has been achieved.

Q. Will my electric bill be lower if I use 120 volt heaters?

A. No. Same size 120 volt and 240 volt heaters will use the same amount of power, measured in watts or kilowatts. Your electric company charges by kilowatt hours.

Q. Should I clean my heater?

A. Yes. Once a year you must clean and inspect your heaters. Please refer to the section "Taking Care of Your Heating System" on the previous page. You may request a copy of the operation & maintenance for your heater if you have lost it.

Q. Why does my new heater produce smoke when I turn it on?

A. In the manufacturing process, a light lubricant is used, which will burn when the heater is energized. The smoke will stop after the heater has fully heated. There is no cause for alarm. It is recommended to open a window during initial operations.

Q. If I need to replace my heater, can I use a higher wattage heater?

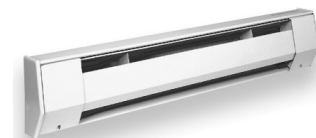
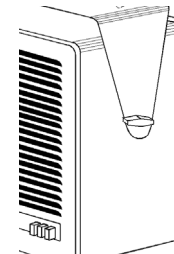
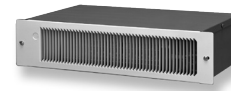
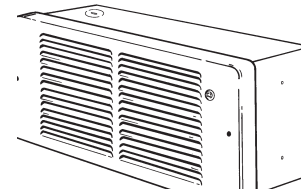
A. Your electrical system was sized for the original heater's wattage. A smaller heater would be OK, but a larger heater may create a hazard.

Q. Are King heaters actually made in Seattle, Washington?

A. Yes. Since 1958 we have made quality residential, commercial and industrial heating products in the same location.



electric zone controlled heating



COMFORT GUIDE

Operation & Maintenance

Congratulations!

You are now the proud owner of a high-quality zonal heating system entirely manufactured in Seattle, Washington U.S.A.

When you purchased this King Electric Heater you chose the finest type of heating system available. It will maintain a constant level of comfort, providing the exact temperature you want in each room.

Here are some helpful suggestions enabling you to get the most comfortable, efficient and safe operation from your King heating system. With proper care and maintenance this King heater should provide years of trouble-free service.



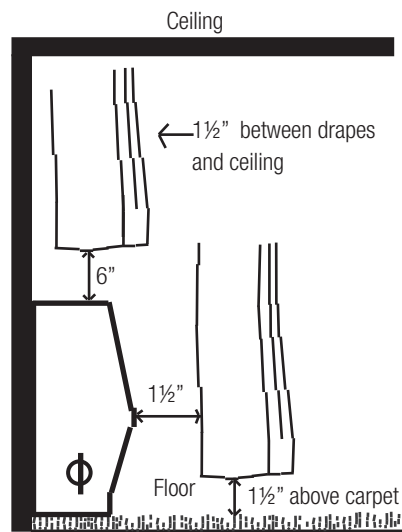
King Electrical Mfg. Company
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Before installation and use:

1. Use a vacuum cleaner or soft bristle brush to remove any dirt/debris that may be on the grill and heater element.
2. Carefully follow the clearances listed (see diagrams) for safe heater operation.
3. Verify the electrical power supply and heater voltage are the same. 240 and 120 Volt heaters are not interchangeable. Reversing Voltage ratings voids any/all guarantees and warranties.

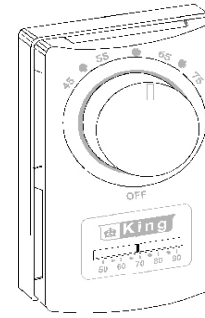
BASEBOARD HEATERS:

Clearances for Safe Operation



Zone Control (setting the thermostats):

Thermostat settings are a matter of personal preference. A few days of adjustments will help you determine the setting that is comfortable for you. Most people keep their living quarters at 68 to 72°F (20 to 22°C) and sleeping areas at 65°F (18°C). It is also wise to set living area thermostats back at night, but not below 60°F (16°C).



Temperature & cost relationship:

When setting your thermostat, you may want to consider the relative cost of various temperatures. The chart at right shows how much higher your heating bill may be if you like temperatures warmer than 70°F (21°C).

80°	+31.0%
79°	+28.0%
78°	+25.0%
77°	+21.9%
76°	+18.7%
75°	+15.6%
74°	+12.5%
73°	+9.4%
72°	+6.2%
71°	+3.1%
70°	0%
69°	-3.1%

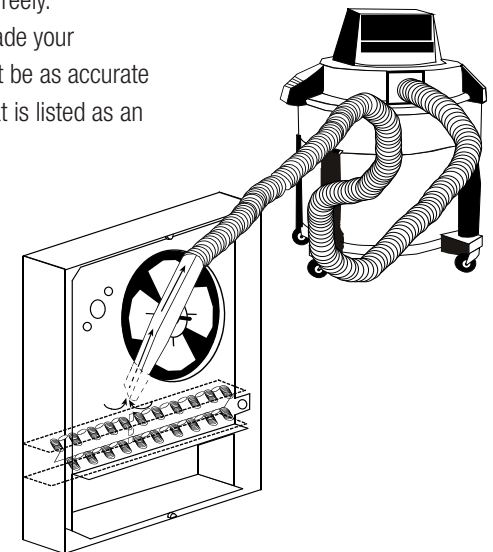
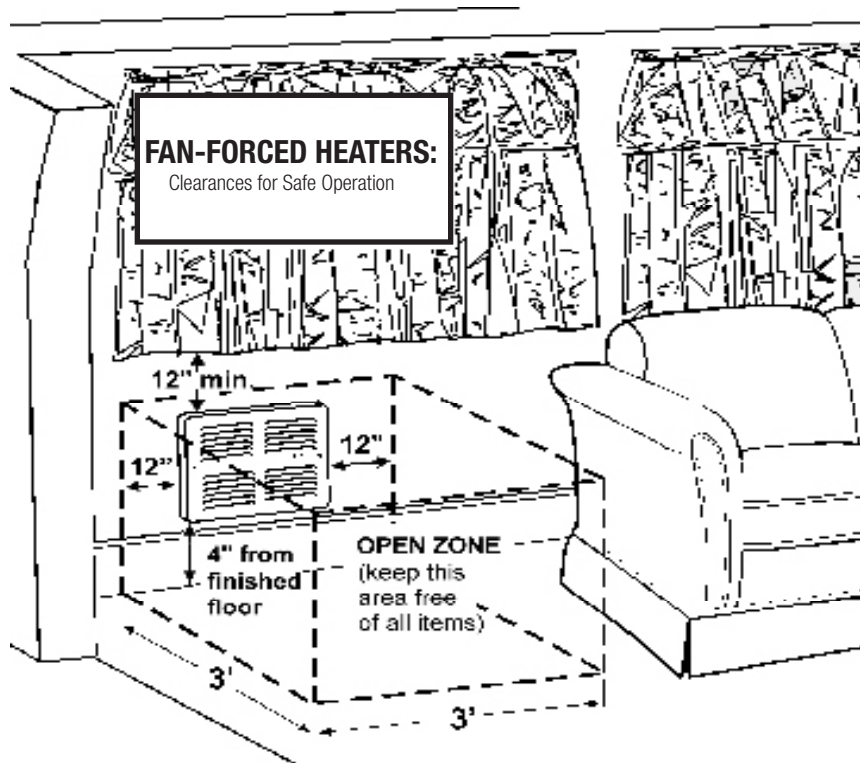
Taking care of your heating system:

At the start of each heating season clean and inspect each heater. It is extremely important to remember to turn off the power at the circuit breaker before attempting any installation, maintenance or repairs. Failure to do so may result in serious electrical shock, burns or possible death.

Remove the grill on fan heaters. Clean any dust or lint from inside the heater with a vacuum cleaner, compressed air or soft bristle brush. Check that the fan spins freely.

Between 5-10 years you may want to upgrade your thermostat, as the sensing element may not be as accurate as when new. The most accurate thermostat is listed as an anticipated model.

If, in the future, you decide to remodel or add rooms to your home, you won't have to worry about the size of your heating system. With electric heat you can add to the heating system, in large or small increments.





OPEN-COIL ELEMENT

An open-coil element using Nickel-Chromium wire that can handle very high temperatures. The coiled wire maximizes the surface area for efficient heat transfer.



DUAL OPEN-COIL ELEMENT

Same as above, except the element wattage can be reduced in half by cutting one of the element wires.



PIC-A-WATT® ELEMENT

The core of the King heating line. Developed in 1988 it has worked flawlessly ever since. It is made from steel elements brazed onto steel plate fins making for a long-lasting maintenance-free heater. The multiple wattage feature allows the exact wattage needed for any room to be selected.



CERAMIC ELEMENT

This core is made of extruded ceramic insulators that increase thermal mass helping improve even heating. The liquid-free design increases safety.



C-FRAME MOTOR

C-Frame motors are inexpensive and commonly used in appliances. King motors contain a large oil reservoir that helps prolong the motor life and reduce maintenance.



EFFICIENCY MOTOR

A unit bearing motor is a heavy-duty long-lasting motor. It uses a fraction of the energy that a C-Frame motor does, thereby saving you money on heating bills. This motor typically runs 15–20 years and never requires oiling. It is either long-lasting cast iron or standard economy-cast aluminum.



ALUMINUM FAN BLADE

King uses aluminum fan blades which are noncombustible. The fan is an impeller type: it draws room air into the heater and then blows out heated air.



SQUIRREL CAGE BLOWER

A long cylindrical blower that keeps the heater quiet. Recommended for areas where heater noise would be unwelcome, such as bedrooms and dens.



SMART LIMIT PROTECTION®

Patented safety system shuts the heater off if an overheat condition occurs. Reset is allowed by turning off the thermostat.



STAINLESS STEEL

An excellent 304 grade, corrosion-resistant stainless steel. Perfect for chemical or saltwater environments.



RADIANT HEAT

A radiant heater provides sun-like warmth. The heat radiates from the heating element warming objects that are nearby.



CONVECTION HEAT

This type of heater has no fans, instead heating by the natural process of warm air rising off the element. Place on outside walls to prevent cold window drafts.



HYDRONIC

The newest heaters in the King product line, using the warmth of hot water circulating from a home's hot water tank or boiler.



QUIET RUNNING

The quietest heaters in the King product line.



MADE-TO-ORDER



SPIRAL STEEL FIN ELEMENT

These steel element tubes have continuous fins that spin to create one of the highest quality, longest-lasting elements on earth.

SELECTING THE RIGHT WATTAGE:

SQ. FT. OF ROOM	WATTS 12.5 FT ²	WATTS 10 FT ²	WATTS 7.5 FT ²
20 feet	250	250	250
40 feet	500	500	500
60 feet	750	750	450
80 feet	1000	1000	750
100 feet	1250	1000	750
120 feet	1500	1250	1000
140 feet	1750	1500	1250
160 feet	2000	1750	1250
180 feet	2250	2000	1500
200 feet	2500	2000	1500
220 feet	2750	2250	1750
240 feet	3000	2400	2000

1. Measure the length and width of the room to determine total square footage.
2. Select level of insulation:
 - *Poor:* Little or no insulation (older homes) – 12.5 Watts per square foot
 - *Average:* R-11 in walls and R-19 in ceiling – 10 Watts per square foot
 - *Fully:* R-19 in walls and floor, R-38 in ceiling – 7.5 Watts per square foot
3. Use the chart to select the recommended wattage. Example: 150 sq. ft. x 10W/ft² (average insulation) = 1500 Watts
4. Make any necessary adjustments:
 - For ceilings above 8 feet increase wattage by 25% for every additional 2 feet in height.
 - Use a minimum of 1000 Watts in a bathroom.
 - If recommended wattage falls between two sizes, select the larger heater.
 - Use 5 Watts per square foot for supplemental heat.
 - For colder climates (prolonged winter temperatures below 20°F) use the next higher wattage level (up to 15 Watts per square foot).