

Know the facts before purchasing portable electric heaters!

In general, portable electric heaters are not a good idea. Besides being very costly to operate, some units represent a serious safety hazard to you and your family. The U.S. Consumer Product Safety Commission estimates that about 120,000 residential fires occur annually (22% of all residential fires) from the use of supplemental heaters. About half of the deaths and one-third of the injuries result from electric heater fires that occur at night when family members are asleep. Electric blankets offer a safer, more affordable alternative. A single electric space heater can consume approximately 1500 kWh in an average year. By comparison, an electric blanket consumes only about 150 kWh in an average year.



We have seen and heard an increased amount of advertising for quartz electric heaters, and how they're supposed to be super energy efficient. The ads state they the electric quartz heaters use the same energy as a coffee maker, and other heaters have the backing of a nationally syndicated radio personality. Some of these products advertise as much as 50 percent energy savings, but how energy efficient are they really?

Many of these portable quartz, infrared, oil-filled, and ceramic electric heaters can provide minor energy savings in certain situations – such as when you need to heat only one room, but not the entire house. These units are also ideal to heat rooms that are not connected to central heating systems, such as additions, garages, basements and workshops.

Whether ceramic, quartz or oil-filled – the efficiency is basically the same as any standard plug-in electric space heater. North Central PPD does not recommend any of these products if your goal is significant energy savings. For maximum energy efficiency, you should consider geothermal or air-source heat pump units that can heat (and cool) the whole house very inexpensively.

Regarding the efficiency of portable electric space heaters; whether oil-filled, ceramic, quartz or standard, they all use electric resistance heat which is considered 100 percent efficient (spend \$1 and receive \$1 worth of heat). Air-source heat pumps are more than 200 percent efficient (spend \$1 and receive \$2+ worth of heat/cool), and geothermal systems exceed 300 percent efficiency (spend \$1 and receive \$3+ worth of heat/cool).

How do portable electric heaters compare to natural gas or propane heat?

As a general rule, electric resistance heaters cost more to run than a natural gas furnace. They cost slightly more to operate than fuel oil and propane furnaces.

Many homeowners endure rising fuel costs year after year with gas, oil and propane and continue to look for ways to reduce their energy bills. If homeowners would add an electric air-source heat pump to their existing natural gas, oil or propane furnace they could reduce their energy costs by up to 30 to 40 percent. A heat pump or geothermal system will provide your family with significant savings and more comfort.