

Tim Stewart,

CEO/Manager

PORTABLE ELECTRIC HEATERS

Understanding how they work is key to using them effectively



A number of portable and hard-wired electric heaters have been introduced to the marketplace in response to high home heating fuel costs.

Don't be misled by cleverly worded ads

that suggest one heater may be more efficient than a competitor's. All electric heaters, except ultra high-efficiency heat pumps, provide 100 percent efficiency, and watt for watt, cost the same to operate.

Three main heater designs

The first step is to understand that there are three main heater categories. The first category is the high-temperature radiant style. They are characterized by the glowing re heating elements and shiny mirrored reflector behind the coils. Radiant heaters don't attempt to heat the air, but rely on "beaming" their warmth directly to people or objects in the room. Just like the sun's warmth, it can be a

The second category is the natural convection style, which transfers heat differently. Instead of using red-hot coils, these heaters distribute the same amount of heat over a wider surface of the heater. This allows the flow of air over their surface

very pleasing form of heat.

(natural convection) to transfer heat to the air. Often seen in a long, slender baseboard design, these heaters are warm to the touch but not hot enough to burn you. Other convection heaters are shaped like old-fashioned cast iron radiators, as found in historic buildings. An oil-like fluid inside spreads the heat around the surface. On a watt-for-watt equivalent, natural convection heaters put out just as much warmth, but you don't feel the intense heat as from a radiant design.

The third category, fan-forced heaters, relies on a blower to push air over the heating coils. Designed like a "mini furnace," these heaters must warm the air in the room to increase comfort. Unlike the natural convection style, they don't rely on a large surface area to transfer their heat to the air. A quick clarification

— small fans are sometimes used in radiant heaters too, as a way to circulate the air. Don't let the presence of the fan fool you; if most of the heat radiates out from visible glowing coils, it's a radiant heater.

What does it all mean?

Each of the three designs described here uses a process called "electric resistance heating." Because all electric heaters use this same process, they all have the same efficiency -100percent. There are no losses. Whatever the heater's shape or size, the amount of heat coming out is the same as the amount of electricity going in. Therefore, any two heaters with a rating of 1,500 watts on the nameplate will deliver the same amount of heat, no matter what they look like. To calculate the hourly cost of operating an electric heater, consider the following:

What is different about each heater is the method used to transfer the warmth from the heating elements to the person or objects that need it. Any of the three portable electric heater types can allow room-by-room variation in temperature. This zonal heating method can save energy, but only by lowering the setting on the home's central heating thermostat. Then in the occupied room, a space heater is used to boost the temperature to a comfortable level.

If you wish to utilize electric heat, we encourage you to employ our load management system to shift on-peak usage to off-peak usage. If you have an automatic backup heating source or storage heat system, you could qualify for a reduced dual fuel rate. By utilizing this approach, you not only save money, you also help keep costs down by avoiding peak times.—Source: National Food and Energy Council; Richard Hiatt, author

A (Amps) \times V(Volts) = W(watts)

W(watts)/1,000) x (hours of use/day) x (number of days used) x (electric rate)

Example using 12.5 amp space heater

12.5 amps x 120 volts = 1,500 watts

1,500 watts/1,000 x 4 hours per day x 30 days x .1065/kwh = \$19.17/month

LOAD MANAGEMENT TEST SET FOR NOVEMBER 18

Each year, a test of the load management system is conducted for members of the Dual Fuel program. This year, the test will take place on Wednesday, November 18. The electric heat will be turned off at 5 p.m. and will be turned back on starting at 8 p.m., with everyone's

electric heat scheduled to be back on by

The test is done each year to ensure the cooperative's load management equipment is working properly and to allow members participating in the Dual Fuel program to make sure their backup

heating systems are operational before winter sets in.

If you experience any problems during this test, or if you have any questions regarding the test, please contact Clark Electric Cooperative, 715-267-6188 or 800-272-6188.









MEMBER APPRECIATION DAY

Once again, beautiful weather set the stage on the morning of Saturday, September 19, for the Annual Member Appreciation Day Pancake Breakfast/Open House.

The pancake and sausage breakfast was just the beginning of the many activities that were available for members of all ages.

Directors and staff were on hand to answer questions and give tours of the new facilities.

The kids enjoyed giant inflatables, pumpkin painting, and picture frame crafting (including their own pictures to put in it). Memorial Medical Center participated with car seat safety, including door prizes for the kids. They also provided health-screening information for the adults.

Greenwood EMS and Fire Department were on hand with their equipment on display and to perform blood-pressure checks. The Greenwood Police Department was present to do a Drug Take Back event, which was very successful.

An Electronic Recycling Event was offered by Clark County Adult Development Service. For the third year, a Food Drive for the local food pantry was included in the events, providing a great way to include the 7th Cooperative Principle, Concern for Community, into this cooperative event.

Kids 12 and under were asked to guess the weight of a huge pumpkin. The actual weight was 156 pounds. Nathan Hull, Colby, and Miriam Collinson, Greenwood, each received a gift card as winners of the kid's door prize for having the closest guess.

Clark Electric Appliance and Satellite was there with HVAC information as well as information on other products offered through that department.

Thank you to everyone who joined us for this year's event. We hope to see you again next year!













ENERGY ASSISTANCE AVAILABLE FOR QUALIFYING MEMBERS

The winter heating season has now begun. It's important for you to make every attempt to keep current on your electric bill. We understand that things do happen that put financial burdens on people. Certain government organizations can offer heating assistance or point you in the direction of a group that can help.

The Wisconsin Home Energy Assistance Program (WHEAP) administers the federally funded Low Income Home Energy Assistance Program (LIHEAP) and Public Benefits Energy Assistance Program. LIHEAP and its related services help more than 230,000 Wisconsin households annually.

Eligibility

You may be eligible for weatherization services if:

- You received benefits from WHEAP or your gross income for the last three months is equal to or less than 60 percent of Wisconsin's state median income (SMI) for your family size.
- Your dwelling/apartment has not been weatherized before.
- · Your household meets certain prior-

ities that may include a high energy burden or use, an elderly or disabled member or a child under six.

For more information and application details, please contact your local office:

Clark County	. 715-743-5233			
Department of Social Servi	ces			
Chippewa County	. 715-726-7862			
Department of Human Services/				
Economic Support				
Marathon County	715-842-3111			
Energy Services, Inc.				
Taylor County	. 715-748-6123			
Human Services Department	nt			
Wood County				

Department of Social Services Wisconsin Rapids Office .. 715-421-8600

Department of Health & Human Services

To learn more or to locate your local agency, call toll free 1-866-HEATWIS (432-8947) or visit homeenergyplus. wi.gov. Other Resources for Energy

WHEAP Income Guidelines for the 2015–2016 Heating Season

Household Combined Household Income			
Size	1 Month	3 Month	Annual
1	\$2,133	\$6,400	\$25,601
2	\$2,790	\$8,370	\$33,478
3	\$3,446	\$10,339	\$41,355
4	\$4,103	\$12,308	\$49,232
5	\$4,759	\$14,277	\$57,109
6	\$5,416	\$16,247	\$64,986
7	\$5,539	\$16,616	\$66,463
8	\$5,662	\$16,985	\$67,940

and Weatherization Programs—CEC
Website: www.cecoop.com, click the
Bill Payment Tab and then the energy
assistant link; Focus on Energy Targeted Home Performance with ENERGY
STAR®: 1-800-762-7077 or visit
www.focusonenergy.com.; Keep Wisconsin Warm Fund – Bill Pay Assistance: 1-800-981-WARM (9276) or
visit www.kwwf.org. (Source: Wisconsin
Department of Administration Brochure)







DEDICATION PLAQUES PRESENTED



Linda Powers, River Valley Architects, presented Tim Stewart and staff with a Dedication Plaque for Energy Efficiency Measures at the new headquarters facilities. Pictured are, from left to right: Mike Ruff, director of operations; Linda Powers, River Valley Architects; Tim Stewart, CEO/general manager; and Linda McAley, director of administrative services.



Linda Powers, River Valley Architects presented Charles Bena, Board President with a Dedication Plaque for the headquarters facilities.

HAPPY THANKSGIVING! Clark Electric Cooperative's office will be closed Thursday and Friday, November 26 and 27.

DAYLIGHT SAVING TIME ENDS NOVEMBER 1

If you are on our Time-of-Day Rate, you probably have a time clock controlling devices. Remember to switch the time clock on these devices back one hour as Daylight Savings Time ends on Sunday, November 1. It is important that your time clocks are reset to avoid using electricity during peak times, resulting in a higher-than-normal electric bill.

Clark Electric Cooperative's Time-of-Day Rate can save you money on your electric bill; however, you must be willing and able to shift your electric usage around so that you can utilize the lower cost of electricity. For more information on incentive rates such as Time-of-Day or special heating rates, contact our office or visit our website at www.cecoop.com.



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