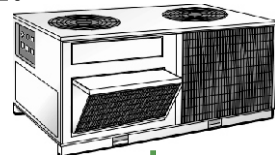


# Ventilating, Air Conditioning & Water Heating

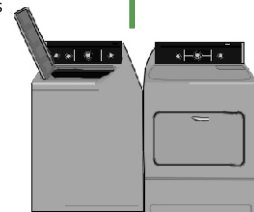
Appliance	Wattage Ratings (watts)	Estimated Use	Estimated Monthly Cost Dollars	Estimated Annual Cost Dollars
Air Conditioner (Room)	900-3200	1400 hours/Cooling Season	6.83 - 24.27	81.90 - 291.20
Power Attic Ventilator	375	8 hours/daily for 3 months	5.85	17.55
Window Fan	200	12 hours daily (5 months/year)	4.68	23.40
Water Heater (Quick Recovery)	4500	20 gallons/day/person for a family of 4. Includes hot water for dishwasher and clothes washer.	30.68	368.13



## Energy Usage and Costs for Home Appliances

This brochure will give you an approximate amount that you spend to operate your home appliances. The figures are based on an estimated time that the appliances would probably be in use. An average cost of .065 cents per kilowatt-hour has been used in estimating costs of the electric appliances listed in this brochure. In order to better understand the cost of electricity, listed below are basic electrical terms used in computing these costs:

- WATT - A measurement of electricity. A 100-watt light bulb uses 100 watts of electricity when lighted. Most appliances and light bulbs are labeled with the watts or wattages they use.
- AMPERE or AMP - Rate of flow of electrical energy.
- VOLTS x AMPS = WATTS
- KILOWATT - 1,000 watts
- KILOWATTHOUR (KWH) - 1,000 watts or a kilowatt of electricity used for 1 hour. The use of a 100-watt bulb for 10 hours equals 1 kilowatt-hour. Kilowatt-hour is the basis for figuring electric bills.



## How to Figure Your Own Energy Costs

To make a rough estimate of the cost of operating an electric appliance, use this simple formula:

$$\frac{\text{WATTAGE (of the appliance) Watts}}{1000} \times \frac{\text{HOURS (of operation) Watts}}{\text{Watts}} \times \text{RATE (\$ per KWH)} = \text{Estimated Operating Cost \$}$$

HERE'S HOW:

- First: Find the wattage rating of the appliance from the list\* or by checking the nameplate data. Remember amps x volts = watts.
- Next: Estimate the number of hours the appliance is used during the month.
- Then: Find your cost per kilowatt-hour to use for the calculation by checking your utility bill. Divide the total amount billed for electricity by the total number of kilowatt-hours used for the month. That will give you the cost per kilowatt-hour.

HERE'S AN EXAMPLE:

If your television is on 6 hours a day for one month that totals 180 hours. (6 x 30 = 180)

The wattage from the list is 200 watts, or to be more accurate, use the wattage figure posted by the manufacturer on the back of the set.

Suppose the cost per kilowatt-hour determined from your bill is \$.065.

Use these numbers in the formula:

$$\frac{200 \times 180}{1000} \times .065 = 2.34$$

\*Remember, some electric appliances are thermostatically controlled (example: ovens, water heaters) and may not operate constantly depending on the setting.



Where Your Energy Go's

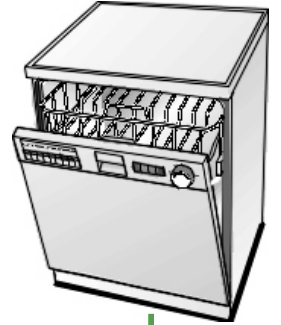
## Kitchen

Appliance	Wattage Ratings (watts)	Estimated Use	Estimated Monthly Cost Dollars	Estimated Annual Cost Dollars
Blender	385	20 mins./mo.	0.008	0.10
Broiler	1400	1 hour weekly	0.39	4.70
Can Opener	180	once daily	0.001	0.02
Clock	2	continuous	0.09	1.14
Coffee Maker (Automatic)				
Brew Cycle	860	twice daily	0.57	6.80
Warm Cycle	80	1 hour daily	0.16	1.90
Coffee Maker (Drip)				
Brew Cycle	1500	twice daily	0.49	5.93
Warm Cycle	70	1 hour daily	0.14	1.66
Convection Oven	1600	1 hour daily	3.16	37.94
Dishwasher				
Includes hot water & drying	1300	once daily	10.14	121.68
Includes hot water w/o drying	1300	once daily	9.01	108.11
Disposal	450	once daily	0.01	0.18
Food Freezer				
15 cu. ft. Manual defrost - Chest	370	66 KWH/mo.	4.29	51.48
16 cu. ft. Manual defrost - Upright	350	100 KWH/mo.	6.50	78.00
16 cu. ft. Automatic defrost - Upright	450	150 KWH/mo.	9.75	117.00
Food Processor	480	20 mins./mo.	0.01	0.12
Frying Pan	1200	1 hour weekly	0.35	4.21
Microwave Oven	1500	30 mins. daily	1.48	17.78
Mixer (Portable)	125	2 hours/mo.	0.02	0.20
Range (Surface units & oven)*	12,000	3 times daily	8.38	100.54
Self-Cleaning process		1-1/2 - 2 hours	0.52	6.24
Refrigerator**				
12 cu. ft. - Automatic defrost	321	1 year	6.57	78.87
12 cu. ft. - Manual defrost	241	1 year	3.92	47.00
15 cu. ft. - Automatic defrost	615	1 year	8.59	103.14
15 cu. ft. - Manual defrost	326	1 year	6.15	73.74
19 cu. ft. - Automatic defrost	600	1 year	12.09	145.08
Slow Cooker	200	48 hours/mo.	0.62	7.49
Toaster	1100	twice daily	0.14	1.74
Toaster Oven (4 slice)	1500	2 hours/mo.	0.20	2.43
Trash Compactor	400	15 mins. daily	0.20	2.37

KWH = Kilowatt-hour

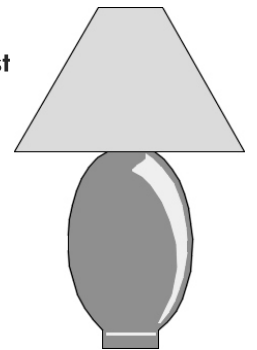
\*Represents average costs for cooking three meals per day using range and oven as needed.

\*\*Newer refrigerators are more efficient and may use less energy than older models considered above.



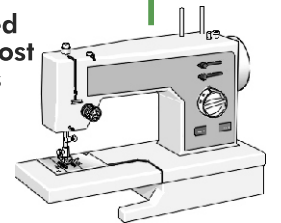
## Living Room

Appliance	Wattage Ratings (watts)	Estimated Use	Estimated Monthly Cost Dollars	Estimated Annual Cost Dollars	
Light Bulbs/Incandescent					
100 watts	100	6 hours daily	1.19	14.23	
60 watts	60	6 hours daily	0.71	8.54	
40 watts	40	6 hours daily	0.47	5.69	
Light Bulbs/Fluorescent					
40 watt bulb with ballast	50	6 hours daily	0.59	7.11	
15 watt bulb with ballast	18	6 hours daily	0.21	2.56	
Radio	20	3 hours daily	0.12	1.42	
Radio/Stereo	All	3 hours daily	0.36	4.27	
Television					
Black/White	Solid	55	6 hours daily	0.65	7.82
Color	State	200	6 hours daily	2.37	28.45



## Utility / Laundry

Appliance	Wattage Ratings (watts)	Estimated Use	Estimated Monthly Cost Dollars	Estimated Annual Cost Dollars
Clothes Dryer	5000	20 loads/mo. (45 mins./load)	4.88	58.50
Garage Door Opener	350	twice daily	0.10	1.18
Iron (hand)	1100	4 hours/mo.	0.29	3.43
Sewing Machine	75	12 hours/mo.	0.06	0.70
Vacuum Cleaner	600	4 hours/mo.	0.16	1.87
Washer (Automatic)	500	20 loads/mo.	0.98	11.70
(Does not include cost to water heater)				
Washer (Automatic)	500	20 loads/mo.	10.56	126.75
(Includes cost to heat water)				



## Bedroom or Bath

Appliance	Wattage Ratings (watts)	Estimated Use	Estimated Monthly Cost Dollars	Estimated Annual Cost Dollars
Electric Blanket	200	3 months use	0.45	1.34
Hair Dryer (Hand Held)	1000	10 mins. daily	0.33	3.95
Hair Setter/Curlers	350	15 mins. daily	0.17	2.07
Shaver	15	5 mins. daily	0.002	0.03
Electric Toothbrush	1	15 mins. daily	0.0005	0.006

