

Compact Fluorescent Lighting



AN EFFICIENT ALTERNATIVE TO THE INCANDESCENT LAMP

The old adage “you can pay now or you will really pay later” is true when it comes to lighting. Incandescent lamps have dominated the residential lighting market for years and still do today. Why? Because they are cheaper to purchase and up until a few years ago provided an unmatched quality of light.

A new and advanced lighting technology called the compact fluorescent lamp (CFL) is a more efficient alternative to the incandescent lamp. After reviewing the following information you will be able to determine if compact fluorescents are for you!

HOME LIGHTING FACTS

- Compact fluorescent lamps use 70 - 75% less energy than their incandescent equivalents. When replacing a 100 watt incandescent lamp a 28 watt CFL is used.
- Compact fluorescents last approximately 10,000 hours, which is 10 to 13 times the life of an incandescent lamp (expected life approximately 750 hours).
- Compact fluorescents are most cost-effective when used at least 2-3 hours per day.
- Although compact fluorescent lamps may appear different than the common incandescent, they fit most standard fixtures found in homes today. The screw-in base is the same on both lamps.



- The typical incandescent lamp wastes 90% of the energy it uses, producing heat rather than light.
- The latest compact fluorescent lamps have improved color rendition. The light is a warm tone that is almost identical to that of an incandescent lamp. Most people can't tell the difference.
- The following table lists several standard incandescent lamps and the appropriate compact fluorescents that can replace them.

Incandescent	Compact Fluorescent
40 - Watt	11 - Watt
60 - Watt	15 - Watt
75 - Watt	20 - Watt
90 - Watt	23 - Watt
100 - Watt	28 - Watt

The compact fluorescent will provide the same amount of light (or lumens) at a fraction of the electricity used.

The following illustration demonstrates the cost of using a compact fluorescent lamp (CFL) vs. an equivalent incandescent lamp for 10,000 hours.



Lighting cost can account for a significant portion of your electrical usage. If your intent is to become more efficient and lower your electric bill, install compact fluorescent lamps. The savings to you are great with little if any inconvenience.

Note: The price for the CFL is \$13.00 with an expected life of 10,000 hours. An incandescent lamp is \$.50 with an expected life of 750 hours. Electricity charge = \$.06/KWH

If you operated the CFL in the above scenario for 4 hours a day the expected life of that lamp is 7 years. With a pay-back of 2.5 years when compared to an incandescent lamp.



Nebraska Public Power District