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Q & A

How To Choose CFL Bulbs?

CFLs (compact fluorescent bulbs) have come a long way. Early versions were very expensive and plagued with problems. (They appeared dim, flickered, didn't come on instantly and burned out sooner than promised.)

But that was then. New technology has solved most of the old problems. Today, using CFLs is one of the easiest and most effective ways to save money on energy. It's as easy as screwing in a bulb and flipping a switch.

Question: ***How do compact fluorescent lights work, and how do they differ from standard bulbs?***

Answer: Standard incandescent bulbs work by using electricity to heat up a thin filament inside the bulb. As the filament heats up, it glows, producing light. The drawback to standard bulbs is that most of the energy consumed – over 80 percent – goes into creating heat, not light. CFLs work on a totally different principle. They consist of two basic parts: a gas-filled tube (what many of us would call the "bulb") and a ballast that contains the electronics. In simple terms, electricity from the ballast excites phosphors on the inside surface of the bulb; these phosphors in turn glow, producing light. Since CFLs don't waste as much energy creating heat, they're much more energy efficient. You see the savings when you compare the wattages; a 15 watt CFL provides about as much light as 60 watt incandescent bulb.

Question: ***I stopped buying CFLs because the first few I bought years ago seemed dim and the color of the light was weird. Are CFLs more like "normal" incandescent bulbs these days?***

Answer: Because CFLs last so long, some of the first-generation bulbs are still burning and giving people the wrong impression of the newer CFLs. The newer bulbs flicker less, make less noise, start up faster and emit light very similar to that of standard ("Type A") incandescent bulbs. The spiral shape, which is often used in CFLs, casts light more like a standard incandescent bulb. The color of the light has improved dramatically. If you couldn't see the bulb, you wouldn't know whether the light was incandescent or fluorescent. "Daylight" bulbs, which broadcast a whiter light, are available for those desiring a cooler, less yellowish light.

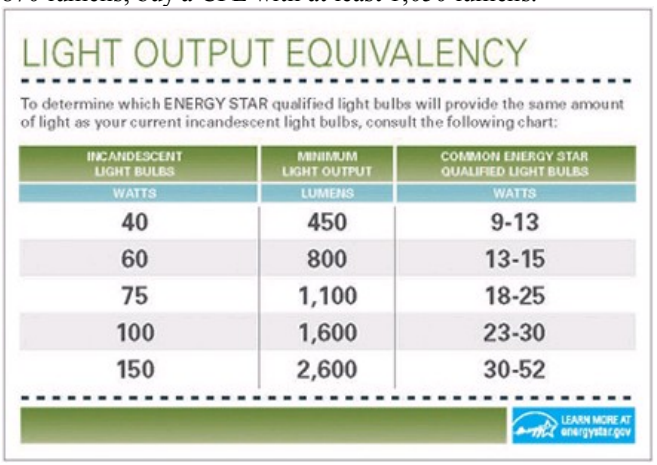
Question: ***Are there some places where using a CFL makes more sense than others?***

Answer: Since many CFLs last up to 10 times as long as incandescent, consider placing them in difficult-to-reach fixtures. It may mean climbing the ladder once every five years instead of every year. It also makes sense to use CFLs in light fixtures that are continuously "on" more than three hours per day. CFLs save energy in any location, but there are some circumstances that can reduce their life span:

• Frequent on-off switching, as in a hallway
• Excessive vibration near doors or stairways
• High-humidity areas, such as a damp basement or crawl space
• A CFL that's not rated for use in an enclosed light fixture might burn out prematurely if enclosed.

Question: ***I've looked at CFLs at home centers, but am not sure what to buy. How do I know which provides as much light as a regular 60 or 100 watt bulb?***

Answer: Look at the lumen rating, not the bulb wattage, to compare real light output. Then buy a CFL with 20 percent more lumens than the incandescent bulb you want to replace. For example, to replace a 60 watt incandescent bulb that has 870 lumens, buy a CFL with at least 1,050 lumens.



LIGHT OUTPUT EQUIVALENCY

To determine which ENERGY STAR qualified light bulbs will provide the same amount of light as your current incandescent light bulbs, consult the following chart:

INCANDESCENT LIGHT BULBS	MINIMUM LIGHT OUTPUT	COMMON ENERGY STAR QUALIFIED LIGHT BULBS
WATTS	LUMENS	WATTS
40	450	9-13
60	800	13-15
75	1,100	18-25
100	1,600	23-30
150	2,600	30-52

LEARN MORE AT energystar.gov

Question: ***CFLs cost five or six times as much as regular bulbs. How long do I need to use them before I recoup my investment?***

Answer: Although CFLs have come down dramatically in price, their electronic ballast and other features do make them more expensive to manufacture than incandescent bulbs. The payback period will vary with the cost of electricity in your area. However, based on a cost of 10 cents per kWh, a 15 watt CFL will cost about $12 to operate over its 8,000 hour projected life span. Burning a 60 watt incandescent bulb with equivalent light output for the same length of time will cost about $48; a cost difference of $36 (and you'll need to buy four to eight bulbs since they have a much shorter life span). Based on those numbers, a CFL will pay for itself in about 500 hours (in about four months if the bulb is used four hours per day).

Question: Can I install CFLs in fixtures that operate on a dimmer switch?

Answer: Yes – but only if you buy the right ones. Look for CFLs that are labeled "dimmable" on the package; they have special ballasts that allow them to be operated using a standard incandescent dimmer switch.

Question: Are there three-way CFL bulbs, and if so, do they require a special lamp or light fixture?

Answer: Yes, three-way CFLs are available, and no, you usually don't need a special lamp. The three-way bulbs that ramp up to the equivalent of a 150 watt incandescent can be either circular or spiral. Both shapes are quite large. For bulbs in that range, check to be sure they'll fit the harp and shade of your lamp. Also make certain your three-way bulb is screwed in snugly. Unless the contacts on the bottom of the bulb make solid contact, your three-way bulb may work like a single output bulb.

Question: What is the best way to dispose of a spent or broken CFL bulb?

Answer: Manufacturers have reduced the amount of mercury in CFLs, but they still contain a small amount (roughly equivalent to the size of the tip of a ballpoint pen). You can find information on sites near you by visiting **earth911.org**. Type in or select "fluorescent bulbs" from the list and then enter your zip code to find facilities in your area. Note that most facilities accept hazardous waste only during certain business hours and/or on certain days. Also call 1-877-EARTH911 for local disposal sites. Some retail stores offer a fluorescent bulb collection service. Check with the store where you purchase the bulbs. There are a number of national organizations that can help also. The U.S. Environmental Recycling Hotline (877-327-8491) can help you find local collection centers. Additional information for businesses and homeowners can also be found at **www.lamprecycle.org**. **Never** send a CFL or other mercury-containing product to an incinerator. If a CFL breaks, sweep up to glass fragments and place them in a sealed plastic bag, along with the wet paper towel you use to pick up stray shards. Don't use a vacuum. Open windows to air out the house.

If every American household replaced just one standard incandescent bulb with one high-efficiency compact fluorescent light-bulb, enough energy would be saved to light over 2 ½ million homes for an entire year!

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Quote Of The Month

"OBSTACLES ARE WHAT YOU SEE WHEN YOU TAKE YOUR EYES OFF YOUR GOALS."

UNKNOWN

A Tip Of The Hat To:

Everyone Who Referred Us In 2008

Thank You