



About compact fluorescent light bulbs

They're not like they used to be.

Though we call them light bulbs, traditional incandescent bulbs are actually small heaters that give off a little bit of light—something you know if you've ever touched a bulb that's been on for a while. These bulbs were technological wonders when they were patented in 1880, but today they are inefficient compared to new compact fluorescent bulbs.

Today's compact fluorescent light bulbs (CFLs) give off high-quality light using a fraction of the electricity that traditional incandescent bulbs use. According to Environmental Defense, if every household replaced three 60-watt incandescent light bulbs with CFLs, we would reduce as much pollution as if we took 3.5 million cars off the roads.

The design and quality of light have improved over the year. CFL prices still are higher than traditional bulbs, but CFL savings add up. They can lower your electric bill and last up to 20 times as long as the incandescent bulbs. Here's how to make the switch:

1. Start with one bulb.

For your first compact fluorescent purchase, buy just one to make sure that it throws the kind of light you want. Light from yesterday's fluorescent lights, common in offices and schools, can seem "cold." Light from CFLs is different and better—CFLs can achieve the same kind of lighting you're used to from incandescent bulbs. Look for packages labeled "2700 degrees Kelvin" or "warm-white."

2. Know your watts and lumens.

We are used to choosing bulbs by how much electricity they use—a 40-watt incandescent bulb is on the dim side and uses less power, and a 100-watt bulb is bright and uses a lot of juice. CFL bulbs have lower wattage numbers than their incandescent cousins, but also provide more light at a fraction of the wattage. Because of this, CFLs are often categorized by lumens. Lumens measure the amount of light a bulb gives off. (See the table on this page for more information.)

3. Get the right shape and size.

Many stores will let you return a bulb if you find it doesn't fit properly, but keep an eye on two factors to save yourself an extra trip.

First, some CFLs have a larger bulb, which can be too big for some lamps. Depending on where you're going to install your CFLs, be sure to know how big the shade is and whether or not the bulb will show.

Many CFLs have a coiled bulb, but there are now versions available that have the same shape and size as an incandescent bulb. These newer CFLs aren't available in many stores yet, but you can order them on a number of Web sites.

Second, most CFLs screw into standard light sockets; however, on some bulbs, the plastic piece above the screw part is slightly wider and might not fit in every lamp.

4. Buy Energy Star to save the most energy.

The most energy-efficient CFLs carry the Energy Star label, the imprimatur of the government-backed energy efficiency program.

5. Be careful choosing CFLs for a dimmer.


There are exceptions to this rule, but the majority of CFLs are not made for dimmers yet.

6. Check for indoor or outdoor use.

CFLs are designed for both indoor and outdoor use. Check the packaging to make sure you get the kind you need.

7. Dispose of your bulbs properly.

All compact fluorescents contain trace amounts of mercury. But there is far less mercury in CFLs than in other items knocking about the house: CFLs (4 mg), thermometers (500 mg), older thermostats (3,000 mg).

Recycling burnt-out CFLs is the best option. To find out if there are recycling options near you, call 1-800-CLEAN-UP for an automated hotline or visit www.earth911.org 

Take the Pledge

In support of the Environmental Defense campaign, you can take a pledge online in the "Million Bulb Swap Out." You also can find a discount offer to buy bulbs (\$5.99 per bulb). Go to www.environmentaldefense.org

Comparing Bulbs

Incandescent	CFL	Lumens	Cost Savings (\$.10/kWh)
40W	11–14W	> 490	\$39–\$44
60W	15–19W	> 900	\$62–\$68
75W	20–25W	> 1,200	\$76–\$83
100W	26–29W	> 1,750	\$107–\$112
150W	38–42W	> 2,600	\$163–\$169

CFLs use about a quarter of the wattage to produce the same light. So to replace a traditional 60-watt bulb, buy a 15-watt CFL.