

How Many Tips Does It Take to Change to the New Light Bulbs? Here are a Few!



You may have heard that light bulbs are changing in 2012. On January 1st, new standards take effect which will give you new lighting choices that are 25-30% more efficient than the decades old incandescent bulbs that your grandparents used. Contrary to reports, incandescent lights are NOT being banned—they are simply becoming more efficient.

Not only will these new light bulbs cut your energy bills, they'll improve the environment by reducing emissions from power plants due to less energy consumption.

Here's what you need to know the next time you are looking for a new light bulb:

1. Know Your Choices. There are three:

Halogen incandescents—These look like the older bulbs, but use 25% to 30% less energy and can last up to three times longer. A new 72 watt energy-saving incandescent bulb which replaces the old 100 watt bulb will cost about \$1.50 but each one will save you about \$3.00 over its lifetime.

Compact fluorescent lamps—CFLs are your best value. They use about 75% less energy than older bulbs and last up to 10 times longer. A \$2.00 CFL will save you up to \$50 over the bulb's lifetime.

Light-Emitting Diodes—LEDs will last up to 25 years (based upon usage of 3hr/day) and save 75%, or more, in energy costs—but they will cost you more to buy than the other choices. Even though LEDs today cost around \$25 per bulb, they'll still save you around \$150 over their 25-year lifetime. As they become more common, you can expect their prices to go way down.

- 2. Use lumens, not watts, to get the right brightness: Watts are the amount of energy used, not how bright the light is. Lumens indicate brightness. The lumen-watt equivalents to the old incandescents are approximately:
 - 40 watts ≈ 450 lumens
 - 60 watts ≈ 800 lumens
 - 75 watts ≈ 1100 lumens
 - 100 watts ≈ 1600 lumens

In other words, if you are trying to replace your old inefficient 60W incandescent bulb with a bulb that gives off the same amount of light, look for one around 800 lumens.

Check the Light "Color": Light color is measured on the Kelvin (K) temperature scale. Lower K numbers means more yellow light and higher K numbers mean whiter or bluer light. To match the color of older, traditional incandescents, often described as "warm white", look for 2700-3000 K. For a whiter light, look for 3500 to 4100 K, and for a bluer light, look for 5000-6500 K.

4. Read the package: A *Lighting Facts* label will be required on packages for most bulbs manufactured after January 1, 2012. As shown below, it will tell you the brightness in lumens, estimated yearly energy cost, expected bulb life, light appearance ("warm" or "cool"), wattage (energy used) and whether it meets Energy Star standards (See #8). The label will also tell you if the bulb contains mercury.

Brightness	Lighting Facts Per Bulb	
000	Brightness	820 lumens
820 Iumens	Estimated Yearly Energy Cost \$7.23 Based on 3 hrs/day, 11¢/kWh Cost depends on rates and use	
Estimated	Life Based on 3 hrs/day	1.4 years
Energy Cost \$7.23	Light Appearance Warm 2700 K	Cool
per year	Energy Used	60 watts



5. The Mercury Question: CFLs contain a small amount of mercury (typically less than 3 mg.) to produce light.

Three milligrams is an infinitesimal amount compared with old thermometers, which contained 500 mg of mercury. Even with the small amount of mercury, CFLs actually reduce mercury in the environment because they reduce the amount of mercury produced by power plants. Intact and in use, CFLs release no mercury. However, like nearly everything else in your house, they need to be properly recycled and cleaned up, if broken. Many retailers recycle CFLs for free. Go to <u>http://www.epa.gov/cfl</u> for more information.

- 6. Check Carefully for Dimming: Not every LED or CFL bulb is dimmable, so check the packaging.
- Get the Right Bulb for Down Lights or Recessed Lighting: Do not use a pear shaped or spiral CFL bulb inside a recessed ceiling can--they won't shine the light down where you want it. Instead, choose an LED, CFL, or halogen reflector or flood light.
- 8. Look for the ENERGY STAR label: CFLs and LEDs with the Energy Star Label meet specific performance standards and are subjected to independent testing to help ensure a high level of efficiency and quality. Beware, not all lights qualify. Check out: <u>www.energystar.gov</u> for more info.
- 9. Find more information at:
 - The Department of Energy's 'Energy Savers' Website (<u>http://www.energysavers.gov/your_home/lighting_daylighting/index.cfm/mytopic=11975</u>)
 - LUMEN (<u>www.lumennow.org</u>)
 - The National Resources Defense Council's Light Bulb Guide (<u>http://www.nrdc.org/energy/lightbulbs/files/lightbulbguide.pdf</u>)

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