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Shedding light on new lighting standards By Stan Varner

nergy efficiency as a way to reduce electrical usage is available in all areas of consumer electronics. Refrigerators, televisions and other items use far less energy to operate than they did just a few years ago.

What's next?

New standards for lighting efficiency and labeling took effect at the beginning of 2012. The Energy Independence and Security Act (EISA) of 2007 require common light bulbs sold in the U.S. to use 25% to 80% less energy. The new standards do not ban any specific type of lighting, it simply requires it to use a minimum of 25% less energy. This includes more efficient incandescent lights, compact fluorescent lights (CFL's), and light emitting diodes (LED's).

The 100 watt incandescent bulb will no longer be produced for U.S. sales, they are still available in stores but once the supplies are gone, they will not be restocked. The 75 watt incandescent will phase out in 2013 followed by 40 and 60 watt incandescent bulbs in 2014.

Why the change?

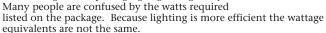
Incandescent lighting is not very efficient. Only 10% of the energy it requires is used to produce light. About 90% is given off in heat. Most CFL's use 75% less energy, 1 CFL can outlast 7 incandescent bulbs. As is the case with most energy efficient items, they cost a little more upfront but save you money in the long run. Replacing 15 traditional incandescent bulbs with new efficient lighting could save you about \$50.00 a year in energy costs. LED's are currently available but cost substantially more than a CFL.

Fans of the incandescent bulb - don't despair. They are available as a choice in a more energy efficient model. The new 72 watt incandescent

bulb will produce the same amount of light as the old 100 watt bulb.

What's on the new packaging?

Informational Lighting Fact labels must be printed on all light bulb packaging beginning this year.



For example, CFL's require less wattage to produce the same amount of light as the traditional incandescent. A 75 watt incandescent bulb is not replaced with a 75 watt CFL, it would be replaced with a 19 watt CFL. The 19 watt CFL lamp will produce the same brightness also called "lumens" as the 75 watt incandescent. This is similar to comparing automobiles based on miles per gallon, with lighting its lumens per watt. The more lumens per watt the more efficient the light is.

Although it is not mandatory, to help with this transition most manufactures will provide the wattage equivalents on the packaging, ie. "60 watt equivalent" or "19 watts=75 watt". This helps when shopping for replacement bulbs.

Other required information includes life of the bulb, light appearance, energy used, estimated yearly cost, and additional materials used in the light. (See the sample label below.)

There is an app for that!

Visit our website www.Howardelectric.com. for links to smart phone apps and other information that will help find the right replacement bulbs for your home lighting needs.

Sample Packaging Brightness or lumens - the higher the number, the brighter the light. Lighting Facts Per Bulb Estimated Yearly Energy Cost - The amount of energy used per year based on 3 hours of use per day and a kWh rate of 11 cents. Brightness 870 lumens Estimated Yearly Energy Cost \$1.57 Life of the bulb - again based on 3 hours per day usage. Based on 3 hrs/day, 11¢/kWh Cost depends on rates and use **Light Appearance** - Indicates the hue of the light from Life ENERGY STOR 2700 K to 6500 K. (K stands for Kelvin). A 2700 K light has 5.5 years Based on 3 hrs/day the same warm yellow color or hue as a traditional incandes-Light Appearance cent. As you up toward the cool side the K number increases. This means the light becomes more white and then blue Warm Cool toward the upper end of the scale at 6500 K. - 70 2700 K Energy Used 13 watts **Energy Used** - A light that uses less watts to produce more lumens is a more efficient light. Contains Mercury For more on clean up and safe disposal, visit epa.gov/cfl.

Contains Mercury - Additional bulb materials are listed here.

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