



Fit the cord to the job

It's important to select an extension cord that can handle the energy requirements of any connected devices.

Every extension cord has a maximum amperage, which is the upper limit on the electrical current it can conduct safely.

If you connect a device that uses a current level above this limit, the device may not function correctly and the cord may overheat.

The power requirements for household electrical devices vary widely. For example, a typical table lamp requires only 0.5 amps, while a leaf blower might use 12 amps. You can usually find the energy requirements for electrical devices listed on the device itself, as well as in the instruction manual. It's a good idea to identify the energy requirements of a device before connecting it to an extension cord.

Many extension cords also have a listed power rating:

- If the rating for the electrical device and the cord are both listed in amps, simply select an extension cord that exceeds the amperage requirements of the device.
- If you plan to connect multiple devices to the cord at the same time, add up the current requirements for each device.

Gauge and length

If an extension cord doesn't include a maximum amperage rating, you can figure out its capacity by looking at its American Wire Gauge (AWG) rating:

- Wire gauge is a measure of the diameter of the conducting wires inside the cord.
- Wires with a larger diameter can handle greater current.
- Lower AWG numbers indicate a thicker wire and a higher current capacity, so the lower the number, the higher the cord's capacity to deliver power.

Typically, you can find a cord's gauge rating printed on the cord jacket. If you're replacing an old cord, look for the AWG number printed on the jacket, and select a new cord with the same gauge.

To determine the cord's capacity, it's important to consider the cord length along with the wire gauge. Every extra foot of cord increases the electrical resistance, which decreases the power the cord can deliver to connected devices. Because of this, it's best to use a cord that is only as long as you need. For example, it's inefficient to use a 100-foot cord to power a device that only needs to extend 40 feet from an outlet. ■

Handle those cords safely

When you reach for that extension cord, always remember: Use extension cords only when necessary and only on a temporary basis. Do not use extension cords in place of permanent wiring. Here are a few other tips for using extension cords safely:

- Do not remove the prongs of an electrical plug. If plug prongs are missing, loose or bent, replace the entire plug.
- Use extension cords that are the correct size or rating for the equipment in use. The diameter of the extension cord should be the same or greater than the cord of the equipment in use.
- Only use cords rated for outdoor use when using a cord outside.
- Do not run cords above ceiling tiles or through walls.
- Keep extension cords out of high traffic areas like doorways or walkways where they pose a tripping hazard.
- Always inspect the cord prior to use to ensure the insulation isn't cut or damaged. Discard damaged cords, cords that become hot, or cords with exposed wiring.
- Never unplug an extension cord by pulling on the cord; pull on the plug.
- Insert plugs fully so that no part of the prongs is exposed when the extension cord is in use.
- Do not nail or staple electrical cords to walls or baseboards.
- Ensure that all extension cords are certified by a nationally recognized testing laboratory and read the manufacturer's instructions carefully. ■

25% The energy you'll save with energy-saving incandescent bulbs

75% The energy you'll save with CFL bulbs

75% The energy you'll save with LED bulbs



Lighting Choices **SAVE YOU MONEY**

All of these light bulbs meet the new energy standards that take effect from 2012-2014.

The energy-saving incandescent bulbs use about 25% less energy than traditional varieties.

Source: energy.gov

Light your home using the same amount of light for less money. Upgrading 15 of the inefficient incandescent light bulbs in your home could save you about \$50 per year. Money-saving options such as energy-saving incandescent, CFL and LED light bulbs are available today, and for high-quality products with the greatest energy savings, choose bulbs that have earned the Energy Star.

What's the difference?

Traditional incandescent bulbs use a lot of energy to produce light – 90 percent of the energy is given off as heat. That lost energy is money being thrown away.

Newer energy-saving light bulbs provide the choices in colors and light levels you've come to expect. The new lights are also much more efficient – so they save you money.

What are the choices?

Three of the most common energy-efficient lighting types include energy-saving incandescents, CFLs and LEDs. They are all more energy-efficient than traditional incandescent bulbs.

Incandescents

Energy-saving, or halogen, incandescents have a capsule inside that holds gas around a filament to increase bulb efficiency. This type of incandescent bulb is about 25 percent more efficient and can last up to three times longer than traditional incandescent bulbs. They are available in a wide range of shapes and colors, and can be used with dimmers.

CFLS

Compact fluorescent lamps (CFLs) are simply curly versions of the long tube fluorescent lights you may already have in a kitchen or garage. Because they use less electricity than traditional incandescents, typical CFLs can pay for themselves in less than nine months, and then start saving you money each month. An Energy Star-qualified CFL uses about one-fourth the energy and lasts 10 times longer than a comparable incandescent bulb that puts out the same amount of light.

CFL bulbs are available in a range of light colors, including warm (white to yellow) tones that were not as available when first introduced. Some

are encased in a cover to further diffuse the light and provide a similar shape to the bulbs you are replacing. If you are looking for a dimmable bulb, check the package to make sure you purchase a CFL with that feature.

LEDS

The light emitting diode (LED) are a type of solid-state lighting – semiconductors that convert electricity into light. Although once known mainly for indicator and traffic lights, LEDs in white light, general illumination applications are one of today's most energy-efficient and rapidly developing technologies. Energy Star-qualified LEDs use only 20–25 percent of the energy and last up to 25 times longer than the traditional incandescent bulbs they replace.

LED bulbs are currently available in many products such as replacements for traditional incandescents, reflector bulbs often used in recessed fixtures, and small track lights. While LEDs are more expensive at this early stage, they still save money because they last a long time and have very low energy use. ■