

#### **LED Replacement Bulbs**

# Frequently Asked Questions concerning LED Replacement Bulbs

There are always a lot of questions about LED replacement bulbs and how they work. We have compiled a list of the questions we get asked most often and hope you find this useful in helping to make the decision to convert to LED bulbs.

### Q: How do I convert my existing fixture to an LED fixture?

A: It is as easy as changing the bulb. If you are using a halogen, CFL or incandescent bulbs in your existing recessed lights (pot lights) or track lights you can just change the bulb to an LED equivalent. LED 120V AC bulbs are available with a standard E26 screw type base or a GU10 base. A PAR30, PAR38 and PAR20 LED bulb is the same dimensional size as its traditional style counterpart. A LED GU10 may be slightly longer than the halogen it is replacing. This is never an issue with a recessed pot light but may cause a concern if you have a track light with a ring that fits over the face of the bulb to hold it in. Many are adjustable but some are not.

#### Q: Is it true that there is no heat with an LED bulb?

A: This is a common misconception about LED lights. It is true that an LED bulb runs significantly cooler than a halogen or an incandescent bulb. An LED bulb projects very little heat forward. If the bulb was lit for 24 hours you could touch the face of the bulb and it would just be warm. You will not be standing under an LED light and feel heat on your head. The heat is transferred to the heat sync part of the bulb. You will notice that the back of an LED replacement bulb is metal. This is the heat sync that keeps the LED chip from overheating. Because of this you want to be sure there is ventilation in the housing so the heat has a way to escape. Stay away from a bullet style track light head that encloses the back of the bulb.

#### Q: Why are LED replacements so expensive?

A: There is a lot of solid state technology inside the bulbs. All LED chips are low voltage so an AC style replacement bulb has a driver built into the bulb to convert AC to DC. In addition if the bulb is dimmable there are additional circuits to make the bulbs dimmable. The good news is that is installed in a pot light or track light with enough ventilation to keep the bulb at normal temperatures the LED replacement bulbs we sell are rated to last 50,000 hours. This means that the bulbs, if left on for 12 hours a day, will light for 12 years. Not so expensive when you factor in the lifespan and the energy savings.



#### Q: Are there limitations to LED replacement bulbs?

A: In our opinion there are limitations to all products. The key is finding the proper replacement bulb to fit the application. Early on LED replacements were best suited for spot lighting or downlighting. As technology matured two very important things happened. First the lights today can produce more light than they could just a few years ago. The other significant change was in the light spread. As the angle increased LEDs were able to provide acceptable light in more applications. A good example would be our pot light inserts which have a 120 degree light spread eliminating "circles" on your floor. Another product that we waited a long time to offer is our A19, 60W replacement bulb. Producing 800+ lumens with a 360 degree light spread makes this bulb a true replacement for a 60 watt incandescent bulb.

In Canada we have another hurdle to face. Line voltage 120V AC replacement LED bulbs must have the proper legal electrical certifications. Please be cautious and remember that just because it is available in the US does not mean it is approved for use in our country. Caution should also be used when buying directly from China. If the price seems too good to pass up there is usually a reason.

# Q: How can a company claim to be selling a 60W replacement bulb that produces less than 800 lumens?

A: In Canada we currently lack any kind of required specifications in order to make a claim about light output. Hopefully this will change in time. We can tell you that to be a true replacement for a 60W bulb an LED must produce 800 lumens. This number is set by the US Energy Star program and serves as a reliable guideline.

## Q: Is there a warm up period for the LED bulb to reach its full brightness?

A: No! Unlike CFL bulbs, LED bulbs turn on at full power without any warm up.

# Q: Do LED bulbs have to go to the ECO Centre for disposal like CFL bulbs do?

A: NO...LED bulbs are made of fully recyclable materials and are non-toxic to people and to the environment. They do not contain any mercury.

If you have other questions please call us and ask. We will add them to the FAQ's to assist others. We can be reached at 1.800.677.2698.