## **LED Light Advantages**

When people have decided that they need a light bulb for their home or even business property illumination, next thing to consider is what type of light bulb is best for their needs. In past years the obvious choice has become one, L.E.D and reasons for that are quite many. L.E.D lights have changed light bulb industry noticeably by improving ways how and what lighting is used in our own houses. Here are listed 10 advantages that L.E.D lights have over their older predecessors incandescent, halogen and CFL lights.

- 1. Long lifetime L.E.D bulbs have significantly longer lifetime than other type of lamps. Average lifetime of LED bulbs and diodes is 50000 hours and can reach up to 100000 hours. That can be more than 10 years of non-stop working. If you use LED lights as your house lights and they are not continuously on, lifetime of one bulb can reach even 20 years. Compared to for example incandescent or fluorescent bulbs who each now average below 10000 (and incandescent above 1000) hours of lifetime, L.E.D lights last about 10 times longer than others and that is huge improvement and advantage of L.E.D lights. L.E.D lights don't just burn out and stop working like other lights, they emit lower power and become dimmer.
- 2. Brightness L.E.D lights can produce more light using less energy that means that they are brighter than other lights for less, for example, one L.E.D flood light can produce same light than two or three halogen flood lights and be as bright. White light produced by L.E.D flood light is pretty much similar to daylight and that can be used in stadiums in dark places to make all area brighter and provide visibility like daylight.
- 3. Less energy usage, smaller electric bills one of main advantages of L.E.D lights is high luminous efficiency which means how well light source produces visible light compared to power usage. About 80% of L.E.D lamps energy is produced into light and only 20% in other energy like heat. In other light bulbs more percent is lost in heat that means more energy to produce same brightness as L.E.D's.
- 4. Durability and Quality L.E.D lights are built with good quality and high durability. They come with different safe and protective covers, for example aluminum and many lights are waterproof. This is great for different outdoor usage, as you can rely on your L.E.D floodlight to suffer some more complex weather conditions like storms, rain, snow, hail and other. Unlike CFL and incandescent bulbs, L.E.D bulbs are more difficult to damage with external shock, impacts and vibrations, because they are made of solid material which is not so fragile and can stand more rough conditions.

- 5. Less heat more L.E.D lights produces much less heat than other light bulbs which means that the risk of electric or fire accidents is significantly reduced. Also they are not so fragile as other bulbs and can't be so easily breakable. L.E.D flood lights are considered to be one of the safest lighting options. The majority of lamps and devices using L.E.D's are "safe under all conditions of normal use" and are classified as "Class 1 LED product".
- 6. No toxic substances Environment friendly L.E.D lights do not contain toxic chemicals like mercury or other hazardous substances compared to <u>fluorescent lamps that contains</u> <u>mercury, which is very toxic to human health and also bad for the environment</u>. L.E.D lamps also are recyclable and over 95% of LED bulb can be recycled. Another environment friendly plus is that L.E.D's have much longer lifetime and 1 LED can work as long as 3 incandescent lights, that saves much more production material and again you help environment by not buying a new light each 3 or so months.
- 7. Resistant to low and fairly high temperatures L.E.D flood lights can still work in low temperatures well below 0 degrees Celsius. Unlike other lights, L.E.D's remains stable and can function well in colder conditions. This is good for any outdoor usage also in winter.
- 8. Low costs on maintenance labor and replacements considering other points mentioned in this article long lifetime, durability and quality, efficiency of L.E.D lights, it is more economical (less costs and man hours of labor) to maintain or replace them. It simply does not take so much attention whether you need to check if light is still working or replace it after few months of work time. Long lifetime means that you probably would not have to worry about replacing bulb for some years, durability and quality means that L.E.D bulbs are tough and durable and will last longer in more extreme weather or other conditions and are harder to break, efficiency helps to achieve long lifetime and save you more additional costs on replacements.
- 9. Direct light and no warming up period instant light on L.E.D lights produces direct light which means that light is focused on one specific area rather than spilling it in other directions. This way more light gets to your desired area and much less light is wasted aside and makes L.E.D lighting more efficient than other lightings, for example halogen bulb, which does not provide such a direct light.
- 10. Also L.E.D lights turns on immediately in nanoseconds and achieve maximum brightness very quickly and they can be switched on and off repeatedly without affecting quality and lifetime of LED bulb.