



LED lighting retro-fits save on energy and maintenance costs

November 25, 2013 - Green Buildings

LED lighting retro-fits are now a compelling option - with short paybacks - to save on both energy consumption as well as maintenance costs for replacement lamping. The savings can be especially significant for difficult to access fixtures that require ladders or lifts. A LED re-lamping program or retro-fit will not only save on energy, but will last for 100,000 hours - far in excess of the useful life of both fluorescent and incandescent products.

LED technology has now advanced to a level where the quality of LED light is comparable to incandescent. You no longer need to compromise light quality to achieve savings. And the savings part of the equation is substantial. A quick example: a 75 watt incandescent can be replaced by 12 watt LED. Translated to cost, a retro-fit from incandescent to LED will reduce your electricity bill by about 80%. A fluorescent to LED retro-fit will reduce your bill by about 50%. And LED products do not contain mercury - as do fluorescents - or other toxins that could be harmful to the environment. Given the 100,000 hour LED lifespan, once you complete your LED retro-fit, your lamping maintenance expense will decline and your energy savings will rise. But before jumping into the LED pond of lamping options, it is important to understand more about the world of LED, so that your retro-fit choices are informed and you avoid the pitfalls associated with low-end LED products.

A LED lamp - Light Emitting Diode - is actually a semi-conductor that has been electrified. Its manufacture is similar to that of a semi-conductor. In the manufacturing process, there are a range of qualities produced and understanding how to identify "quality" is the key element in ensuring a successful retro-fit. The higher end LED lamps, such as GE, Phillips or Toshiba products, are manufactured to proprietary standards that have been established in the United States. These standards are maintained regardless of the manufacturing location - here or overseas. These quality products qualify for the Energy Star rating and will come with a warranty - usually seven years. Lower quality lamps - with poor crystals - are in effect the rejects. These lamps are sold into the discount market by the "no name" brands. These lower quality lamps generally do not have a consistent light color and will have shorter life spans. The old saying - you get what you pay for - could not be more true in the LED world of lamping options.

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