

## No Fluorescents Allowed – The New Normal

Your cutting edge lighting retro-fit, which is now five years old, is not so cutting edge today. Chances are that some of the lighting products you used back then are not even being manufactured today - or are being phased out. Take for instance the CFL. Not so long ago utility companies were providing incentives to switch from incandescent lighting products to **CFLs (Compact Fluorescent Lamp)** – a thin fluorescent tube wound together in the shape of a fist). CFLs were designed to be used as an energy saving replacement for a traditional light bulb (technically known as an A 19). Back then this was a smart move. If the **A19** that you were replacing was a **60 Watt bulb**, the CFL that you would use to replace it with would have been in the 23 Watt range. This replacement would have saved 37 Watts. Translating this savings from Watts to dollars (based on a 24 cent Con Ed billing rate -average for NYC) would mean that you saved \$88 annually per lamp (based on a 24/7 operating schedule - normal for a lobby, fire stairs or a corridor). If that same lamp operated only 8 hours a day, your saving would have been \$30 annually. These savings would have covered the cost of your retro-fit in a matter of months.

Another example would be the **40 Watt T12 Fluorescent tube** – the work horse of fluorescent lighting. Back when, a T12 tube was all you would see in terms of fluorescent lighting for offices, classrooms, basements – you name it. Today the T12 Fluorescent product has been out of production for years, but surprisingly you still see them, especially in facilities that have not received an upgrade. The Fluorescent

40 Watt T12 lamp was subsequently replaced by the **Fluorescent 28 Watt T8**, which in turn has now been replaced by a **15 Watt LED tube**. If you still have some of the **Fluorescent 40 Watt T12** lamps, you should replace them with **15 Watt LED tubes**. Your savings will be \$52 annually based on 24/7 operating schedule. Again your cost will be covered in a matter of months.



Fast forward to today – GE which is one of the name brand manufacturers of CFLs - has recently announced that it will stop making and selling CFLs in the United States by the end of 2016. Why? Because according to GE senior management, there are better lighting alternatives available. The CFL - along with the other fluorescent products - are obsolete. There are better LED alternatives available for energy saving lighting retro-fits.

With the GE announcement, the trend is clear. LED products have advanced to a level where they are becoming the preferred option for lighting solutions. In 2014 LEDs made up about 5% of the American market. According to the National Electric Manufacturers Association, LEDs increased to 15% of lamp shipments for the third quarter of 2015. Today even more so. Additionally, Energy Star ratings, which are the recognized accreditation of quality, as well as a requirement for utility retro-fit incentives, are shifting away from fluorescent to LED products.

There are also other important underlying environmental and health issues with regard fluorescent lighting products which should encourage the move away from fluorescent products. High on the

list is the mercury content of fluorescents. Fluorescent lighting products are gas-filled tubes with a phosphorescent coating on the inner surface. When turned on, a voltage kick vaporizes the mercury in the tube which creates ultraviolet (UV) light. The phosphorescent coating covering the inner surface of the tube absorbs the UV light which produces a glow – the light emitting from the lamp. It is no secret that Mercury is a hazardous material, so a broken tube carries the risk of mercury entering the body through the lungs (breathing the gas) or the skin (coming in contact with mercury residue). There are also disposal issues with spent and broken tubes. Not much talked about, but that does not make the negative health and environmental issues go away. LED lamps, on the other hand, contain no mercury, are 100% recyclable and have a significantly longer lifespan. Now with the combination of recent advances in LED technology along with the environmental friendly nature of the product, LED has become the better alternative.

So where does this leave a building with its 5 year old lighting retro-fit. The answer is simple. It's time for another go at it. The good news is that it will all be paid for by the utilities, either through lower monthly utility bills, or a combination of lower monthly bills and incentives. Either way, your facility will be the beneficiary.

So how do you know if your building is a good candidate for lighting retro-fit? This time around the answer is very straight forward. Think in terms of the New Normal - "No Fluorescents Allowed." If your building has florescent products, they are "Not Allowed" - so it's time to think of a retro-fit to LED.

**Here are some rules to follow:**

**Quality** – There are a large number of quality LED products available. There are also a large number of lesser quality LED products promoted as lower cost alternatives. Do not even think of going for a "low cost alternative". For a successful retro-fit, focus only on products from high quality manufacturers that come with warranties as well as Energy Star or DLC – Design Lights Consortium - designations.

24 Hours Per Day					
	60 Watt Incandescent	CFL - Compact Fluorescent Lamp	LED Lamp	40 Watt Fluorescent T12	15 Watt LED Tubes
Cost Per Year	\$136	\$48	\$15	\$84	\$32

**Identify the LED product that works best for your retro-fit** – There are many quality LED options available for most retro-fits. You need to identify the specific LED products that will work best for your project. This may well require advice from an industry expert. In depth knowledge of product specifications from all of the quality manufacturers is essential as well as how the individual products actually perform under different field conditions.

**Get Samples** – Install a small number of the LED products selected as samples. This will give you an opportunity to make an on-site evaluation as well as determine if you have the optimum color and lumens for your retro-fit. If adjustments are required – easily done – because of the small number LED products involved.

**Navigation** – Work only with an independent industry expert who is not associated with any one manufacturer. Even better, select an independent expert who is a Con Ed Marketing Partner, who can not only guide you through the process, but source Con Ed funding as well. Expert navigation and funding are key ingredients to a successful LED retro-fit.

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<p><b>FREE LED FEASIBILITY STUDY</b>          go to <a href="http://www.greenpartnersny.com">www.greenpartnersny.com</a></p> <p>Fill out the form on the home page          Provided at no cost or obligation</p>	 <p>954 Lexington Avenue, Suite 320, New York, NY 10021  <b>Call Toll Free 800-595-1094</b></p>	<p><b>Con Ed Marketing Partner</b>          Specializing in          Rebates and Incentives          for LED Lighting Retrofits</p>
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