

Topic: LEDBARKIT advantages over LED tubes

We would like to provide you with the following information regarding our LEDBARKIT solutions.

Why use the LEDBARKIT?

This type of retrofit solution is a more efficient, more reliable, more universal fit, less liability and better piece of mind alternative to LED tubes.

- **More efficient** because the higher efficiency optics, LEDs and drivers we use in these products provide higher lumens per watt and less wattage compared to LED tubes.
- More reliable because of the significant amount of aluminum that we use as a heat sink on the back of the LEDBAR to properly dissipate heat and keep the electronics cooler than LED tubes.
- More universal fit because our bars are designed to fit in between the sockets of either T5 or T8 fixtures. That means that you can specify a "4ft" LEDBAR for ANY T5 or T8 style fixture whether it be a troffer, a vapor tight, a pendant, a strip etc.
- Less liability because you will be getting rid of the old fluorescent tube sockets that often can lead to future issues such as arcing, early failure or even fire, all issues that have occurred in LED tube installations.
- Better piece of mind because the LEDBARKIT family comes standard with a 10-year system warranty. For
 example, something goes wrong with a UL Type A LED tube install, the contractor ends up arguing with the LED
 tube manufacturer, the ballast manufacturer and the socket manufacturer to see who is at blame. By
 purchasing the LEDBARKIT system, RemPhos/Light Efficient Design provides a single, easy point of contact for
 the system warranty.

Where has the LEDBARKIT been previously installed?

The LEDBARKIT family of products has been manufactured and sold by RemPhos/Light Efficient Design for over 5 years. To date we have successfully deployed over 2,000,000 LEDBARKITs in all types of facilities across the United States and Canada. Many of our highest volume installations are on military bases and in hospitals.

Below is a list of a few of the many projects where LEDBARKIT-external driver (LBE) or the new LEDBARKIT-internal driver (LBI) have been installed and running without any issues:

Project Name	Location	QTY of LEDBARKIT used
Center for Disease Control (CDC)	Across the USA	30,000
Marine Base	Marine Corps Logistics Base Barstow	10,000
Veteran's Hospital (VA)	Across the USA	30,000
K-112/Middle/High Schools	Across the USA	200,000
Harvard University	Massachusetts	5,000
Manufacturing facilities	Across the USA	40,000
Air Force Base	Hill Air Force Base, Utah	200,000



Does the LEDBARKIT meet BAA compliance?

Most of our products are available as special-order items to meet BAA compliance, including the LEDBARKIT family.

There is typically a cost adder for us to manufacture the product here in the USA to meet BAA. And the "-BAA" suffix must be added to the end of the part number when ordering.

All of the LED lighting products manufactured for the Quantico project were built in compliance with BAA requirements. Products are assembled at our Middleton, Massachusetts facility.

Certain materials and components used in the manufacture of the BAA fixtures, retrofit kits or lamps may be sourced outside of the USA. Final assembly and manufacturing takes place at the Middleton facility in compliance with BAA Section 1605.

Will retrofitting an existing fixture with the LEDBARKIT maintain the UL listing of the fixture?

All of our retrofit kits, including the "LEDBARKIT" product family are UL Listed to UL1598C Classified Retrofit Kit standards.

UL1598C allows for in field retrofit of fixtures with our LED kits.

The UL listing for the fixture with the new LEDs will not be void. The entire system is UL listed.

Every single model of LEDBARKIT is UL listed to UL1598C.

The UL e-file number is: E344517. You can find the products used on this project on the following link from UL's website: http://productspec.ul.com/document.php?id=IFAR.E344517

Further information

We have a plethora of detailed information on this product family available. The following video tutorials cover many commonly asked questions in an easy to watch video format:

- LEDBARKIT-External Driver (LBE): https://youtu.be/vw7P2f-hMmM
- LEDBARKIT-Internal Driver (LBI): https://youtu.be/Ee9rBG-HpDs

Conclusion

Since our company has over 2,000,000 LEDBARKITs installed and running in projects for many years, trouble free; we are confident that this is the most reliable and energy saving solution for your project.

Thank you,

David Gershaw - Chief Innovation Officer

