



HVAC, Lighting and Energy Solutions

## LED LIGHTING RETROFITS - tremendous electricity savings, better light, less maintenance

Both T12 and T8 fluorescent light fixtures are considered **outdated technology**. By mandate of the U.S. Department of Energy, T12 ballasts and lamps, as well as some T8 lamps, may no longer be manufactured or imported.

Replacing T12 fixtures with T8 fixtures has a minimal impact on electricity consumption, may not qualify for available utility rebates, still leaves bulb and ballast maintenance issues to contend with, and rarely provides a payback within the expected life of the replacement fixtures. In other words, the upgrade project costs are never recaptured.

Replacing entire fixtures is costly, labor-intensive and wasteful. Retrofitting fluorescent and HID fixtures with Redblue's LED lighting kits, however, will allow you to save as much as 85% on lighting-related electricity and maintenance costs! Factoring in available rebates and tax incentives, the project payback period is typically under two years and can be 12 months or less when lights burn for extended periods. Believe it or not, several of our retrofit projects have been self-funded from day one.

### Annual Electricity Cost by Source

	30W LED*	40W LED	T8 (4')	T12 (4')	60W LED	T12 (8')
<b>bulbs</b>	—	—	4x32 watt	4x34 watt	—	2x110 watt
<b>ballast factor</b>	.98	.98	.92	.88	.98	.88
<b>total watts</b>	30.6	40.8	139.1	154.5	61.2	250.0
<b>ANNUAL COST</b>	\$ 954.72	\$1,272.96	\$4,339.92	\$4,820.40	\$1,909.44	\$7,800.00
<b>SAVINGS vs. T12</b>	80.2%	73.6%	10.0%	—	75.5%	—

notes: costs do not reflect maintenance savings or rebate and tax incentives based upon 100 fixtures, 10 cent kWh rate, 12 hr daily usage, 5 day week  
\* suitable light for hallways, stairways, bathrooms and lobbies



offices



factories



hospitals



schools

## FLUORESCENT TROFFER AND HANGING FIXTURE RETROFIT KITS



- as low as 30W per kit, providing up to 80% reduction in power consumption
- can be ordered fully dimmable for effect and/or added electricity savings
- compatible with any troffer size and both parabolic & acrylic lens designs
- 150,000+ hour life expectancy
- 10 year warranty

## HIGH-INTENSITY DISCHARGE (HID) RETROFIT KITS



- as low as 40W per kit, immediately decreasing electricity usage by 60-70%
- active cooling technology enables 24/7 operation in environments up to 130° F
- available with photo cell, surge protection and multiple lensing options for ideal light distribution
- 70,000+ hour life expectancy
- 5 year driver warranty and 10 year warranty on all other components

### Both LED lighting retrofit solutions:

- are UL listed and DLC rated (i.e. rebate qualified) luminaire conversion retrofits
- eliminate the costly need for replacement of existing fixtures
- are manufactured with premium grade Samsung diodes and silicone-potted Mean Well (MW) drivers
- take bulbs completely out of the maintenance equation
- eliminate distracting and headache-inducing light flickering and ballast hum
- can be installed by Redblue or end users

