

## LED Lighting Retrofitting

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### Retrofitting Fluorescent Lights with LEDs

READING ELECTRIC, a leading supplier of electro-mechanical equipment, services, and problem solver for Industrial and Commercial customers for over 50 years provides technical information to the Region's Residential, Commercial and Industrial Community. This Bulletin provides information on LED Fluorescent Lighting Retrofitting.

Advancements in LED Lighting Retrofit Kits will retrofit any interior or exterior lighting to a solid state LED component. This conversion can be completed with minimal downtime. The LED Retrofit has proven to be ideal for industrial, commercial, and office applications needing a long term solution with a payback in 2 years or less. LED Lights have a life expectancy that exceeds 11 years and after 11 years, the LED lighting solution will still be operating at 70% efficiency.

Retrofitting Fluorescent Light Fixtures with LED Lighting can be as simple as fluorescent tube replacement to replacing the complete lighting fixture. However, even the more involved fixture replacement normally only requires approximately 60 minutes. Either method enables conversion of existing fluorescent fixtures into low-maintenance, high-efficiency LED lighting.



#### LED Kit Retrofit versus LED 'Drop-In' Tube Replacement

The fluorescent 'troffer' user has two options for making such a conversion: installing LED 'drop-in' replacement tubes that operate with the existing fluorescent ballast; or retrofitting the troffer with a LED light Kit consisting of replacing the light tubes and replacing the existing ballast with an LED-optimized transformer. With either option, a qualified electrician should make the retrofit.



The drop-in tube replacement option will provide energy savings, longer tube life and will improve the life of the ballast. However, a complete retrofit of tubes and ballast will outperform drop-in tube replacements in terms of efficiency, light output, and reliability. This retrofit can include the replacement of the entire fixture.

The drop-in tube option is very easy, but leaves the consumer with an old ballast of unknown quality that could thermally-compromise LED performance and life, and may pose a high voltage safety issue.



**REMEMBER: We offer 24 / 7 Repair Service.**

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