Shunted vs. Non-Shunted Sockets

ThinkLite: A commitment to produce the safest LED retrofit products available

The benefits of retrofitting any commercial or retail space from fluorescent to energy efficient ThinkLite LED are significant. ThinkLite LED retrofit solution consumes less than half the electricity of fluorescent, provide improved lighting and eliminate lamp and ballast maintenance for up to ten years. What’s more, our driverless technology provides for the brightest LED solution available at 180 lumens per watt.

We also are deeply committed to product safety. We have developed an exacting process for eliminating the fluorescent ballast and connecting the ThinkLite LED directly to the power supply. As well, our LED retrofit solutions incorporate the lighting industry’s most advanced safety features to ensure proper installation, connection and eliminate any potential for electric shock, while adhering and exceeding all UL1598C retrofit safety standards.
Compatibility with both shunted and non-shunted sockets.

To cut cost on the internal architecture of the LED lamp, many manufacturers choose to place both the live and neutral terminal on the same end of the lamp, leaving the other a dead end. This kind of construction is compatible only with non-shunted sockets containing wire holes on both ends of the socket.

In contrast, ThinkLite LED lamps are constructed to actively utilize both ends of the lamp, one end feeding the live connection and the other end feeding the neutral. This unique construction allows direct connection with both non-shunted and shunted sockets, those that have the wire holes only on one side.

Compatibility with shunted and non-shunted sockets make ThinkLite LED lamps not only easier to install than other options, but they are also a safer choice as verified by all three regulatory bodies, UL, DLC and OSHA. When installing ThinkLite LED lamps according to the installation instructions, you are ensured that there are absolutely no safety hazards to be concerned with.

Accidentally installing a fluorescent lamp into a fixture without a ballast.

Because all LED retrofit solutions require a bypass of the ballast, there is considerable risk in the event that the LED tube is removed and a fluorescent tube is installed in its place. Only one end of the fluorescent lamp will be charged.
This difference in charge potential at the two ends of the lamp will cause an electric shock to anyone handling the lamp while the fixture is switched on; and will also serve as a fire hazard to the electrical main panel. In most cases, it will cause the main relay in the building to break.

Unlike other LED products that feed the electric current from one end, ThinkLite lamps feed the electric current from both ends, requiring fixture wiring to accommodate this.

If a fluorescent tube is installed in a fixture that has been modified to power a ThinkLite LED tube, there will be absolutely no unsafe charge buildup on one end of the lamp. The fluorescent lamp will simply not turn on, a benign result to what could be a potentially dangerous situation.

**Whatever the lamp voltage, safety first.**

The fail safe nature of the ThinkLite solution applies to all voltages, 277V, 347V and 480V. This makes ThinkLite the safest LED tube on the market today.

As with any good electrical practice, retrofitting fluorescent fixtures with ThinkLite UL approved LED solutions require strict adherence to the installation and safety instructions. When this is done, you are assured of safe and trouble-free LED illumination for years to come.