# LED Tube Lamp

## Installation Guide

## Technical Specification:

1. Verbatim LED T8 Tubes are suitable to replace T8 fluorescent lamps in fixtures containing standard non-shunted G13 (medium bi-pin) sockets.
2. Rewiring is REQUIRED for retrofit usage. Refer to the installation steps in this **Installation Guide.**

| Part Number | LED Tube Model Number |
|---|---|
| 98804 | T8-2FT-W9-L1000-C30-NON |
| 98805 | T8-2FT-W9-L1050-C35-NON |
| 98806 | T8-2FT-W9-L1050-C40-NON |
| 98807 | T8-2FT-W9-L1050-C50-NON |
| Input Voltage Vac | 110-277 |
| Input Frequency Hz | 50/60 |
| Input Wattage W | 9 |
| Input Current A | 0.085A Max |

| Part Number | LED Tube Model No. |
|---|---|
| 98808 | T8-4FT-W18-L2000-C30-NON |
| 98809 | T8-4FT-W18-L2100-C35-NON |
| 98810 | T8-4FT-W18-L2100-C40-NON |
| 98811 | T8-24FT-W18-L2100-C50-NON |
| Input Voltage Vac | 110-277 |
| Input Frequency Hz | 50/60 |
| Input Wattage W | 18 |
| Input Current A | 0.170A Max |

**Verbatim 5 year warranty www.verbatimlighting.com/warranty.**
**For support, visit www.verbatimlighting.com/support**

This device complies with Part 15 of the FCC rules. Operation is subject to the following twoconditions: 1) this device may not cause harmful interference, and 2) this device must acceptany interference received, including interference that may cause undesired operation.


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## Installation Steps:

1 Make sure power to the luminaire is switched off at the source.
2 Remove the lens or diffuser (if applicable) and the existing fluorescent lamps from the luminaire.
3 Open the wiring compartment.
4 Cut off all wires that connect the ballast.
5 Ensure that the fixture contains non-shunted G13 bi-pin lamp holders **(Figure 1).**
6 If not, replace lamp holders at the power end with non-shunted lamp holders.
7 Connect one wire from lamp holder to branch circuit L (LIVE) and also connect the other wire at the opposite end to the branch circuit N (NEUTRAL). **See Figure 2.** Do not connect the opposite side to power. Verbatim T8 tubes are designed for single sided connections only. Use appropriate wires for connection.
8 Make sure all sockets are replaced and wired accordingly to the appropriate wiring diagram **(Figure 3).**
9 Close up wiring compartment.
10 Install the new Verbatim LED T8 tube into the wired lamp holder end.
11 Apply Relamping Label on a visible location inside the fixture. Relamping Label is packed with this guide.
12 Replace diffuser (if removed in step 2).
13 Switch on power to the luminaire.

**Fig. 1 Non-shunted and shunted socket**

(a) Non-Shunted

(b) Shunted

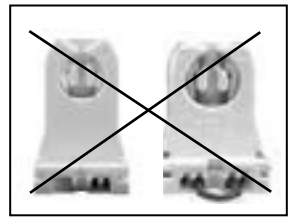
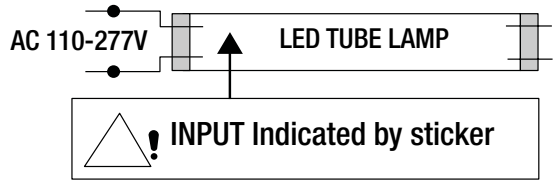
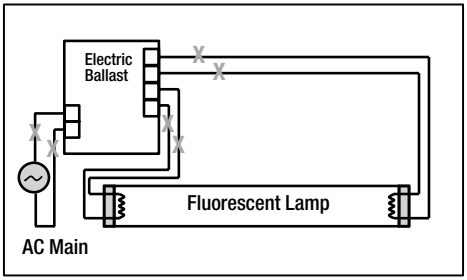


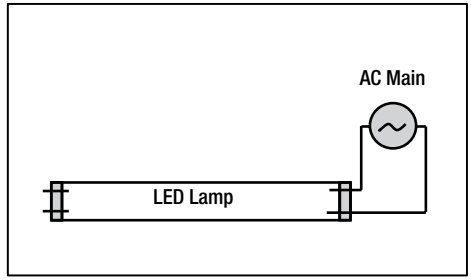
**Fig. 2 Wiring type**



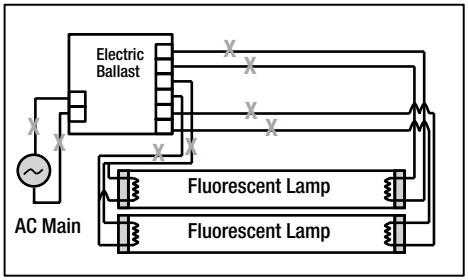
## FIGURES 3

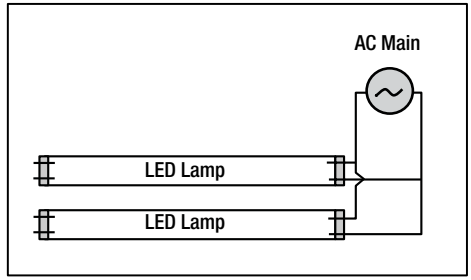
(a) Luminaire with one tube and one ballast



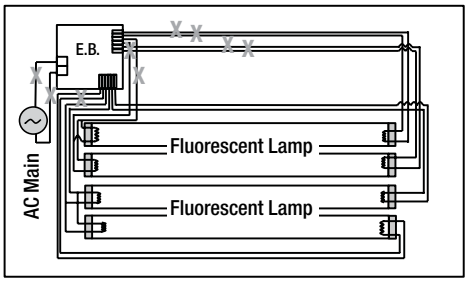



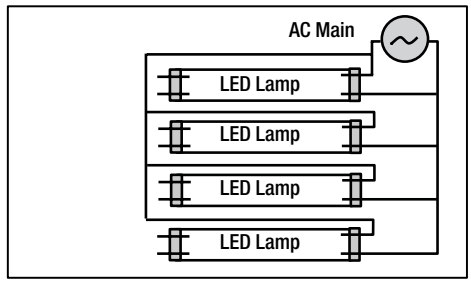

(b) Luminaire with two tubes and one ballast



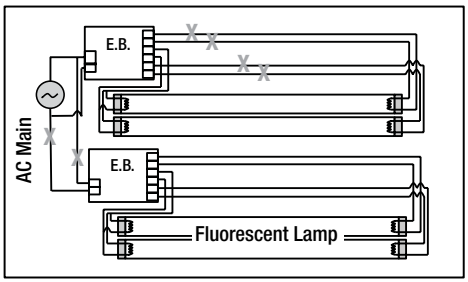



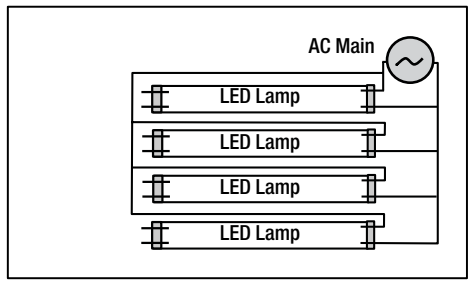

(c) Luminaire with four tubes and one ballast




(a) Luminaire with four tubes and two ballasts



## Luminaire Description for Retrofit Installation:

1. These LED tubes are suitable to be installed in standard T8 luminaires.
2. These LED tubes are NOT suitable to be installed in luminaires which use a remote starter.
3. These LED tubes are intended to retrofit a maximum of four lamps, UL and CUL listed surface mount, or type IC or non-IC recessed mount fluorescent luminaires that use straight tubular lamps.

| Model Number | Luminaire Dimension with Max. No. of tubes Length x Width x Height (cm) |
|---|---|
| 98804 | 60 x 60 x 8 |
| 98805 | |
| 98806 | |
| 98807 | |
| LED Tube Intended to Retrofit Max. No. Tubes in Original Luminaire | |
| Max. 4 LED tubes can be operated in a luminaire with a diffuser | |

| Model Number | Luminaire Dimension with Max. No. of tubes Length x Width x Height (cm) |
|---|---|
| 98808 | 120 x 60 x 8 |
| 98809 | |
| 98810 | |
| 98811 | |
| LED Tube Intended to Retrofit Max. No. Tubes in Original Luminaire | |
| Max. 4 LED tubes can be operated in a luminaire with a diffuser | |

## LED Tube Installation Guide: WARNING

**READ AND FOLLOW ALL SAFETY INSTRUCTIONS**

**DANGER -**
RISK OF SHOCK – DISCONNECT POWER BEFORE CARRYING OUT ANY INSTALLATION WORK

**WARNING -**
Risk of fire or electric shock. LED Retrofit Kit installation requires knowledge of luminaire electrical systems. If not qualified, do not attempt installation. Product must be installed in accordance with the National Electrical Code or your local electrical code. Contact a qualified electrician.

**WARNING -**
Risk of fire or electric shock. Install this kit only in luminaires that have construction features and dimensions shown in the photographs and/or drawings.

**WARNING -**
To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects.

**WARNING -**
To avoid potential fire or shock hazard, do not use this retrofit kit in luminaires employing shunted bi-pin lampholders. Note: Shunted lamp holders are found only in fluorescent luminaires with Instant-start ballasts. Instant-start ballasts can be identified by the words “Instant Start” or “I.S.” marked on the ballast. This designation may be in the form of a statement pertaining to the ballast itself, or may be combined with the marking for the lamps with which the ballast is intended to be used, for example F40T12/IS.

**WARNING -**
Risk of fire or electric shock. Luminaire wiring and electrical parts may be damaged when installing retrofit kit hardware. Check for enclosed wiring and components.

- Do not make or alter any open holes in an enclosure of wiring or electrical components during kit installation.
- Installers should not disconnect existing wires from lampholder terminals to make new connections at lampholder terminals. Instead, installers should cut existing lampholder leads away from the lampholder and make new electrical connections to the lampholder lead wires by employing applicable connectors.
- “This luminaire has been modified to operate LED lamps. Do not attempt to install or operate fluorescent lamps in this luminaire,” shall be marked on the retrofit luminaire where readily visible by the user during normal maintenance, including lamping.
- Suitable for dry locations only.
- Do not use if product is damaged.
- Do not use with dimmers.
- Not intended for use with emergency exits.
- These LED tubes must be operated within an ambient fixture temperature of -40ºF and+113ºF (-40ºC and +45ºC) to comply with all safety and warranty regulations.

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