LED T8 DIRECT WIRE

INSTALL INSTRUCTIONS (BALLAST BYPASS - UL TYPE B)



WARNING: THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE INSTALLATION CODE BY A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT AND THE HAZARDS INVOLVED

- RISK OF SHOCK: DISCONNECT POWER BEFORE INSTALLATION
- Risk of fire or electric shock The electrical rating of this product is 120-277V, the installer must determine whether they have AC120V-277V at the luminaire before installation.
- Risk of fire or electric shock Retrofit kit installation requires knowledge of fluorescent lighting luminaires electrical systems. If not qualified, do not attempt installation. Contact a qualified electrician.
- Risk of fire or electric shock. Install this kit only in the luminaires that have the construction features and dimensions shown in the drawings.
- Risk of fire or electric shock. Do not use this kit in luminaires that employ shunted bi-pin lamp holders (found in fixtures that use instant start ballasts.)
- Risk of fire or electric shock. Luminaires wiring, ballasts, or other electrical parts may be damaged when drilling for installation of retrofit kit hardware. Check for enclosed wiring and components.
- 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
 lampholders 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. For more information, contact the LED luminaire retrofit kit
 manufacturer.
- THE RETROFIT KIT IS ACCEPTED AS A COMPONENT OF A LUMINAIRE WHERE THE SUITABILITY OF THE COMBINATION SHALL BE DETERMINED BY AUTHORITIES HAVING JURISDICTION. PRODUCT MUST BE INSTALLED BY A QUALIFIED ELECTRICIAN IN ACCORDANCE WITH THE APPLICABLE AND APPROPRIATE ELECTRICAL CODES. THE INSTALLATION GUIDE DOES NOT SUPERSEDE LOCAL OR NATIONAL REGULATIONS FOR ELECTRICAL INSTALLATIONS.

IMPORTANT SAFETY INSTRUCTIONS

- Do not make or alter any open holes in an enclosure of wiring or electrical components during kit installation.
- The end retrofit luminaire has been modified and can no longer operate the originally intended lamp.
- Caution-Risk of Electric Shock-Use in Dry and Damp Locations Only.
- Risk of Electric shock-Do Not Use Where Directly Exposed To Water.
- This device is not intended for use with emergency exit fixtures or emergency exit lights.



WARNING DISCONNECT POWER BEFORE INSTALLING OR SERVICING.

REMOVING FLUORESCENT LAMP SYSTEM

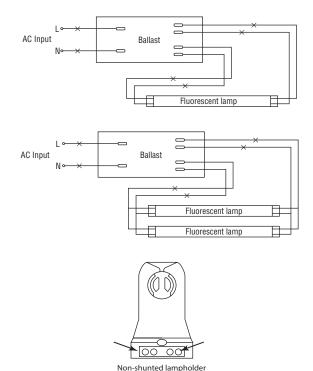
- Disconnect power from fixture
- Remove fluorescent bulb
- Remove wiring compartment cover
- Cut all wires which are connected to the ballast and remove it.

STOP

DO NOT install this product in a fixture that uses shunted lamp holders (found in all fixtures with instant start ballasts). Installing this product with shunted lamp holders will cause a short circuit condition in the lamp holder and create a fire or shock hazard. Before continuing, determine if the lamp holders currently installed in the fixture are shunted or non-shunted. If the current lamp holders are shunted, cut the wires away from the lamp holders and install non-shunted lamp holders, making new connections with the lead wires at terminals indicated here:

NOTE: If using existing non-shunted lamp holders, installer should not disconnect lead wires from the lamp holders and make new connections at terminals. Instead, cut lead wires away from lamp holder and make new connection to lead wires using approved connectors.

PQL Direct-Wire (UL Type B) Lamps are designed for use with PQL LED-Ready fixtures (follow lamp wiring instructions). When using any alternate-brand fixture, please review the specific PQL lamp installation guide wiring requirements first, to make sure the fixture is compatible before lamp installation.



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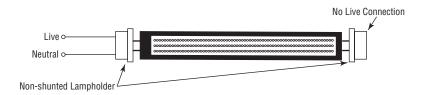
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RETROFITTING FIXTURES WITH ONE LAMP

NOTE: Only one end of this LED tube received power. The "powered" end is indicated with a sticker on the tube itself. Before beginning installation, determine which end of the fixture will be the "powered" end and which end will be the "dead" end.

- 1. Make sure AC power to fixture is OFF
- 2. Make sure ground wire from AC supply is securely connected to ground screw inside fixture.
- 3. Connect black (live) and white (neutral) lead wires from the lamp holders on "powered" end to incoming AC supply black (LIVE) and white (NEUTRAL) wires with approved wire connectors. If only one lamp is being installed, proceed to step 4 below.



RETROFITTING FIXTURES WITH MULTIPLE LAMPS

After completing steps 1-3 above, connect terminals on the "powered" lamp holder for the first lamp matching terminals on "powered" lamp holder for a second with black (live) and white (neutral) wires, being sure to maintain polarity. Repeat this "daisy chain" connection for each additional lamp.

- 4. When all connections are complete, place appropriate connectors/wire nuts on the end of any unused wires.
- 5. Replace wiring compartment cover
- 6. Place sticker that is included with this product on wiring compartment cover or other conspicuous place on or inside the fixture. Sticker reads: "This fixture has been modified. The ballast has been removed. DO NOT install fluorescent lamps in this fixture"
- 7. Place sticker that is included with this product somewhere near the "powered end" socket(s). Sticker reads: "The socket(s) on this end of the luminaire are supplying line voltage. Be sure to install the powered end of the LED tube(s) into the sockets on this end of the luminaire."
- 8. Install LED tube(s), matching the end of the lamp that has the "L/N" sticker to the lamp holder that is connected to the Live and Neutral wires.
- 9. Re-connect power to fixture

