INSTALLING LED Lighting Top Tips and Things to Avoid

TIPS THINGS TO AVOID

ANY RETROFIT

(1) Always de-energize the circuit first.

Turn the power to the luminaire OFF, preferably at the circuit breaker.

(2) Always verify you have the appropriate color temperature (CCT) for the space and occupants.

Too white or too yellow may spoil the mood or hurt productivity.

(3) Always research dimming compatibility of the light source and the control before installing.

Not all LEDs are dimmable and not all dimmable LEDs are controlled the same way.

(4) Always check the dimensions for proper fit before purchasing.

The lamps or luminaires may be too wide, too long, too tall, or have the wrong sockets.

(5) For a ballast driven installation, always verify ballast compatibility first.

This applies to Type A (ballast-driven or plug-and-play lamps).

(6) For a ballast bypass installation, always verify the pinout, wiring method and type of lamp holder required.

Mis-wiring can damage the product and reworking takes time and costs money.

- (7) Always verify the correct mains voltage.
- (8) For a ballast driven installation, always check the age of the ballast if there is a failure.

Chances are the ballast may have reached the end of its life, and sometimes the LED exposes it.

(9) Always account for emergency lighting luminaires and ensure those luminaires have appropriate batterypowered drivers.

(1) Never hot swap an LED lamp

Hot swapping is removing or installing a lamp with the luminaire powered ON

(2) Avoid extreme CCT unless specified

Under 2500K will be very yellow and over 6500K will look blue.

(3) Never test dimming after all the lamps are installed

Reworking takes time and costs money, and there is a chance you may damage the lamps or controller.

(4) Never force a lamp or luminaire that does not fit.

Torqueing, bending, and pushing may damage the product.

(5) For a ballast driven installation, never test for ballast compatibility after all lamps have been installed.

This can lead to lamp and ballast failures, and the rework takes time and costs money.

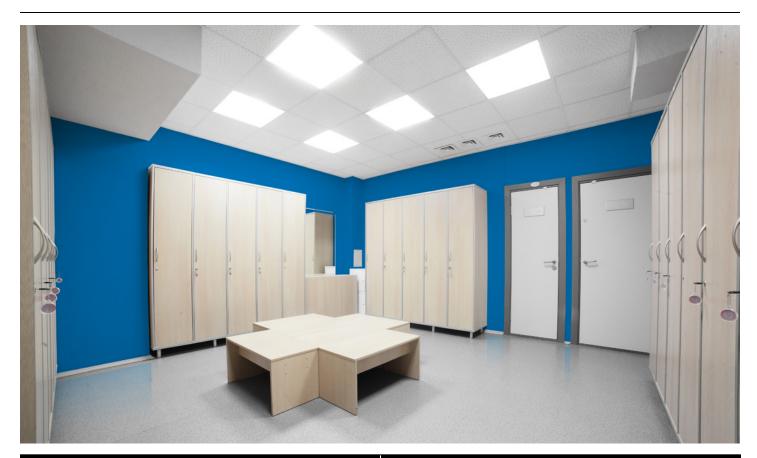
(6) For a ballast bypass installation, never test the wiring after all lamps are installed.

Test along the way to avoid a major rework after the retrofit is complete.

- (7) Never install lamps or luminaries that do not support the existing main's voltage.
- (8) For a ballast driven installation, never assume all existing ballasts are the same make and model.
- (9) Never forget to include emergency lighting in the retrofit plan – whether in a luminaire or in dedicated hardware that meets code.

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	TIPS		THINGS TO AVOID
RETROFITTING WITH A REPLACEMENT LED LUMINAIRE			
•	Always ensure the new luminaire includes the proper mounting hardware for your application.	•	Never install a luminaire without utilizing the proper and specified mounting methods.
RETROFITTING WITH LED KITS			
•	Always check that the existing luminaire mechanically and electronically supports the LED kit.	•	Never purchase an LED kit without first measuring mechanical fit and verifying connectivity.
•	Always cap off 0-10v dimming leads on the LED driver if dimming is not used.	•	Never install LED kits without verifying the functionality first.
RETROFITTING WITH LED TUBES			
•	Always verify if the tube requires shunted or unshunted Tombstones.	•	Never install an unshunted LED lamp into a shunted lamp holder and vice versa.
•	Always verify if the LED replacement lamp is single-ended or double-ended.	•	Never install a single-ended LED replacement lamp in a luminaire wired for double-ended lamps, and vice versa.
RETROFITTING WITH LED MODULES/LIGHT ENGINES			
•	Always verify the LED engine and LED driver fit and location.	•	Never fasten the LED engine to the luminaire frame until the light engine lays completely flat against the frame sheet metal
•	Always verify that the luminaire has provisions for both the LED driver wiring and the LED light engine wiring.		enclosure.
		•	Never install both the LED driver wiring and the LED light engine wiring without creating proper pass-through holes in the enclosure.

For specific questions about LED technology:

- Contact your Field Application Engineer
- Send your questions to Technical Engineering Services at tes@unvlt.com
- Contact your local Universal Lighting representative
- Email marketing@unvlt.com

