LED Tubes Type Breakdown by Installation





Quickest Install

Ballast Compatible (Plug and Play)

Integrated LED tube (UL type A)

Simply replaces a fluorescent tube.

Works with existing ballast Quickest installation Lowest installation cost Operation limited by the ballast lifetime.

4 types available

- T8 only compatible
- T12 only compatible
- T8/T12 compatible
- T8 electronic compatible and ballast bypass

Optimal Pro Install Ballast Bypass

Ballast Bypass LED tube (UL type B)

Direct wire to mains(L N)
Single-ended Type B requires re-wiring

Uses no external driver or ballast Eliminates ballast compatibility issues Optimal efficacy Must re-wire ballast

2 types available

- Single-ended. Requires replacing shunted with un-shunted lamp holder and rewiring fixture.
- Double-ended. No new lamp holders and no re-wiring.

Most Flexible - Quick and Optimal

Dual Mode (Ballast Compatible and Ballast Bypass)

Dual Mode Internal driver LED tube (UL type A+B)

Most flexible of all options Enables plug & play and ballast bypass any time Latest Technology

Can be installed using existing ballast and also enables ballast bypass when the fluorescent ballast fails.

Plug and play uses existing electronic ballast for quickest and lowest cost installation.

Ballast bypass does not require lamp holder replacement. Enables optimal efficacy and eliminates ballast compatibility issues.

Ballast Compatible



Ballast Bypass



Dual Mode



