

## Where are the best places for linear LED in commercial offices?

Linear LEDs have come a long way over the last couple of years. Between questions on plug-and-play versus bypass ballast to figuring out when it's the right time to retrofit, it's clear that linear LEDs are here to stay.

Now, what part of a commercial office should be the first to undergo an LED retrofit? That would be the natural next question.

When it comes to linear lamps in particular, we like to recommend beginning with 24/7 applications, which are often outside of the main areas of the building — perhaps in the parking garage, stairwells, or the basement. Then, gradually move inside to the sockets at the core of the building, strategically making high burn areas top priority.

Here's a quick breakdown of some of the most common applications.

### The Workhorse: 2 x 4 or 2 x 2 fluorescent troffer



The fluorescent troffer is one of the most widely used fixtures in commercial offices. You'll find it in hallways, offices, common areas — basically, anywhere. They may have plastic lenses, a mirrored grid ("louvered" in lighting terms), or the bulbs could be housed in a higher-end looking basket for less direct light.

The most common lamp you'll find in a 2 x 4 troffer is a 4-foot T8.

As with a lot of the fixtures we discuss here, different-sized T12 fluorescent lamps used to be more commonplace, but T12s are extremely rare in many areas around the country nowadays, due to their production phase out in 2014 and their lack of efficiency.

The lamps you'll most commonly find in a 2 x 2 troffer, meanwhile, are a 2-foot T8, a u-bend T8 fluorescent.

The two primary factors for considering if an LED retrofit is right for fluorescent troffers is the burn time and fixture accessibility. If the fixtures are on more than 12 hours a day or if gaining access to change burned-out bulbs is difficult or expensive, you may want to consider LED.

Fixture	Application	Most Common Lamp(s)
<b>2 x 4 Troffer</b> 	Used in offices, common areas, hallways, etc.	4' T8
<b>2 x 2 Troffer</b> 	Used in offices, common areas, hallways, etc.	2' T8 or U-bend T8

## The Enduring: 2 x 4 vapor tight fixtures



The vapor-tight is most commonly found in outdoor applications, especially in coastal areas where salt can take its toll on outdoor light fixtures. These are made of a composite material and they have a gasket seal so the lighting components are protected from the elements. You'll find it in parking garages, stairwells, or outdoor canopies.

The most common lamp you'll find in a 2 x 4 vapor tight is a 4-foot T8.

The two primary factors for considering if an LED retrofit is right for vapor tight fixtures is the burn time and fixture accessibility. In many cases, vapor-tights are used in parking garages where lighting is left on 24/7.

In this application, moving to LED can make great financial sense and pay for itself quickly.


Fixture	Application	Most Common Lamp(s)
<p>2 x 4 Vapor Tight</p> 	<p>Used in parking garages, stairwells, or canopies.</p>	<p>4' T8</p>

## The Practical: 2', 3', 4', or 8' Strip Fixture

The fluorescent strip fixture is one of the most cost effective ways to get reasonably efficient and bright light in a space. It is typically used in stock rooms, mechanical rooms, or back office areas. It is also a go-to fixture for cove lighting because the unsightly fixture is concealed and yet provides soft, even lighting.

The most common lamp you'll find in a strip fixture is a 2', 3', 4', or 8' T8.

Cove lighting can be a great place to consider LED lighting because bulb replacement is generally time-consuming and difficult. Back-office areas or stock rooms may not be a great place to start with an LED retrofit since burn times may be lower.

Fixture	Application	Most Common Lamp(s)
 2', 3', 4', or 8' Strip Fixture	Used in cove lighting, stock rooms, mechanical rooms, back-office areas, hallways, etc.	2', 3', 4', or 8' T8

Here's a quick guide for telling the difference between fluorescent bulbs.

## FLUORESCENT QUICK GUIDE



No matter where you look in your commercial office building, there will be a linear application that's ready to be retrofitted to LED.