

Facility Solutions Group

COMMERCIAL LIGHTING BUYER'S GUIDE

Thank You For Downloading the Commercial Lighting Buyer's Guide!

We created this guide to help you navigate a lighting upgrade from start to finish with confidence. It draws from FSG's decades of experience supporting customers across healthcare, education, retail, office, industrial, and public-sector environments. Our goal is simple: make lighting upgrades easier, clearer, and more achievable regardless of the size or complexity of your facility.

What you'll learn

- How to identify your existing lighting equipment accurately
- Differences between lamp types, shapes, bases, and technologies
- How color temperature and CRI impact the look and performance of your space
- How to perform a Lighting Audit using the included worksheet
- How to choose appropriate LED replacements and fixtures
- What to consider during installation and planning
- When it makes sense to utilize FSG for a full facility audit or turnkey upgrade

Each section is written to be practical and actionable so you can document what you have, understand your options, and avoid costly missteps.

How to Use This Guide

- Start with Step 1: Learn how to conduct a Lighting Audit. This critical step influences everything else in the guide.
- Use the reference charts.
- Fill out the Audit Worksheet.
- Work through Steps 2 & 3: Learn how to choose new lighting and prepare for installation.
- Reach out to FSG: If your facility has specialized needs or multiple locations, FSG can conduct the audit for you.

Lighting Guide Team
FSG.COM | (888) 523-3447

Need help?

If your facilities have unique requirements, special environments, large footprints, or multiple locations, FSG can conduct a comprehensive audit and develop a customized turnkey lighting upgrade plan tailored to your needs.

Table of Contents

Introduction

Step 1: Conduct a Lighting Audit

How to assess your existing lighting

Lamp Types & Identification

Lamp categories, technologies, and where they're used

Lamp Shape & Base Reference Charts

Visual reference for quick identification

Color, Temperature, & CRI

How light appearance affects work and comfort

Conducting Your Audit

Filling out the Lighting Audit Worksheet

Step 2: Order Your New Lighting

Choosing the right LED products

Step 3: Install Your New Lighting

Planning for installation and project sequencing

Working With FSG

How our team supports your project from audit to installation

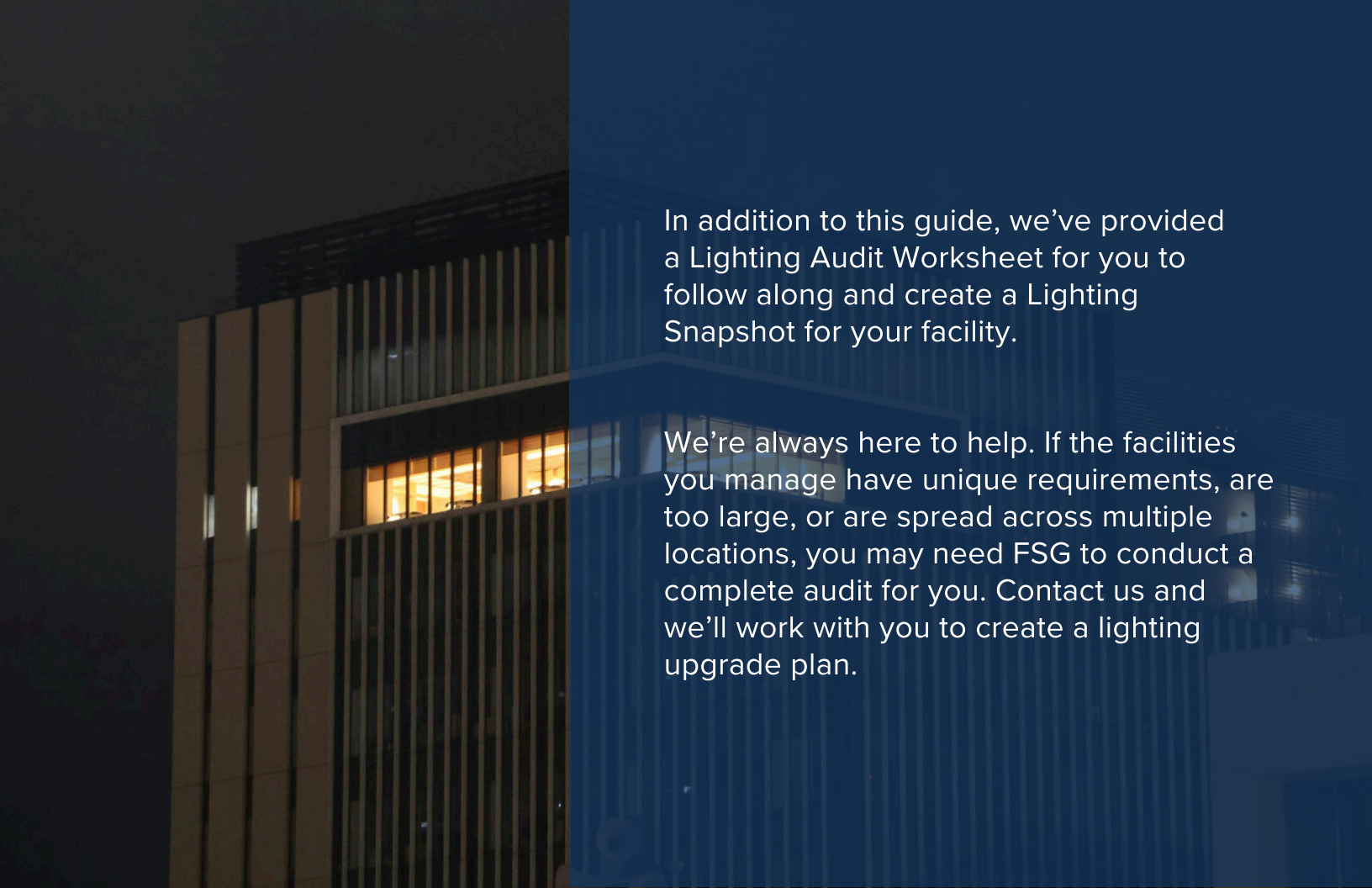


STEP 1

LIGHTING AUDIT

The first step in any lighting project is to conduct a **Lighting Audit** or snapshot.

We'll use this Lighting Audit to determine the type of lighting you currently have, the quantity of each type, and the potential energy savings that can be achieved with an LED retrofit. This snapshot will also serve as a guide when ordering lights in step 2.



In addition to this guide, we've provided a Lighting Audit Worksheet for you to follow along and create a Lighting Snapshot for your facility.

We're always here to help. If the facilities you manage have unique requirements, are too large, or are spread across multiple locations, you may need FSG to conduct a complete audit for you. Contact us and we'll work with you to create a lighting upgrade plan.

What types of lighting do you have?

For you to love your new lights, the upgrade process needs to be easy. To ensure your new lights fit, you'll need to determine what lighting you currently have.

The lighting industry has been around since the early 1900s. Like any industry, the technical description of products has become increasingly complex as new products and innovations enter the marketplace over the years. Below, we'll briefly describe some of the ways we describe lamps, so upgrading your lighting is a smooth process. Although most of your lights will fit into a few categories, we'll identify your current lights by:

Environment, Look, Shape, Wattage, Color, and Base

Lamps used for General Lighting

Filament Lamps

Regular Incandescent Lamps

Halogen Lamps

Discharge Lamps

Fluorescent Lamps

Linear

Compact

HID Lamps

High Pressure Sodium

Metal Halide

Mercury

Low Pressure Sodium

LED

Lamp Environment

What type of environment does your lamp (bulb) live in? There's a significant difference between lamps designed for an office, a kitchen, or an industrial setting. If your facility has locations with these or other special requirements, let us know, and we'll ensure you get lighting that meets your specific needs.































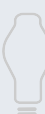































Look

Most lamps you need will likely either be warm white, cool white, or somewhere in between. There may be special situations where a blue, red, or another color lamp is necessary for the task at hand. FSG isn't locked into any specific vendor or manufacturer, so if a lamp exists, chances are we can find it for you.

Shape, Size & Base

Shapes and sizes vary, but most lamps in your facility will either have a screw-in base (medium or candelabra) or standard pins in the case of fluorescent tubes. If you find fixtures that fall outside of these standards, we've provided a comprehensive chart in the appendix to help you identify your lamps.

LAMP SHAPES AND APPLICATIONS

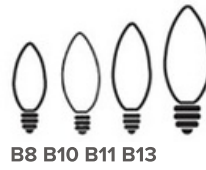
							
	A LINE	GLOBE	BT	DECORATIVE	REFLECTOR	TUBE	
DECORATIVE							
HANGING							
CEILING							
RECESSED							
TROFFER							
SCONCE							
EXTERIOR WALL PACK							
TRACK							

BULB SIZE & SHAPE REFERENCE CHART

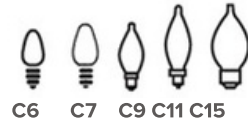
A LAMPS



B LAMPS



C LAMPS



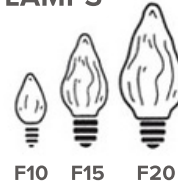
C LAMPS



RP & S LAMPS



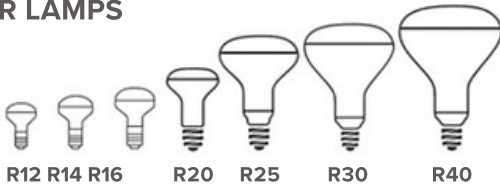
F LAMPS



PRISM



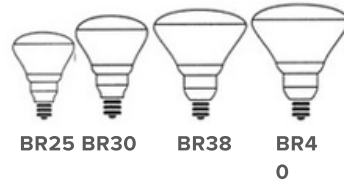
R LAMPS



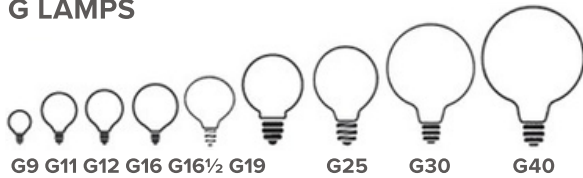
MR LAMPS



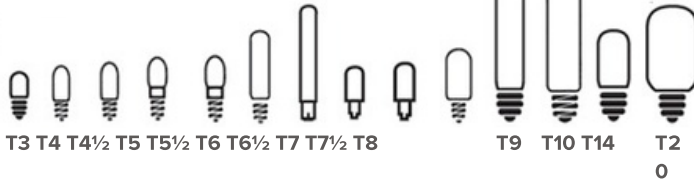
BR LAMPS



G LAMPS



T LAMPS



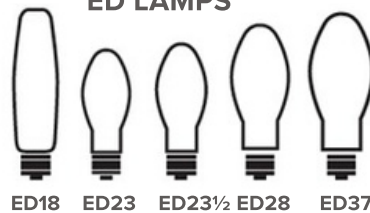
BT LAMPS



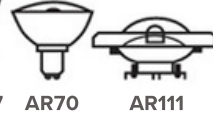
ET LAMPS



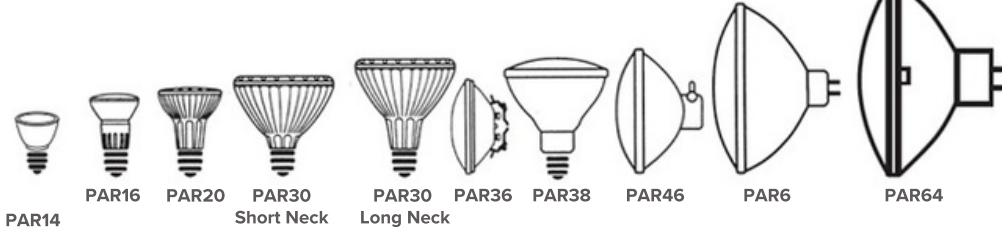
ED LAMPS



AR LAMPS



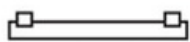
PAR LAMPS



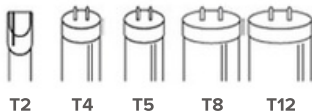
SPECIALTY



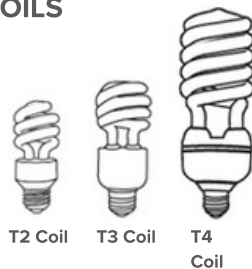
LINESTRA



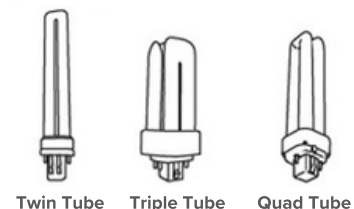
LINEAR FLUORESCENTS



COMPACT FLUORESCENT COILS

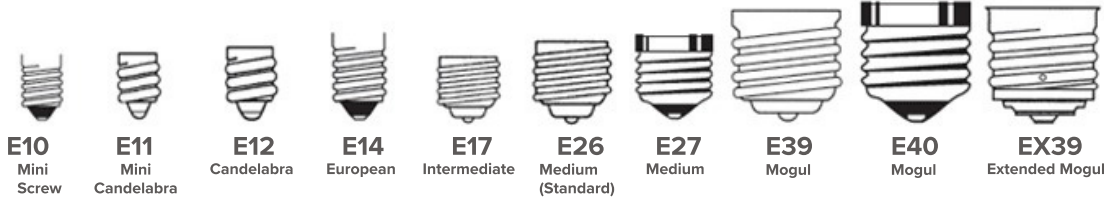


COMPACT FLUORESCENT PLUG IN LAMPS

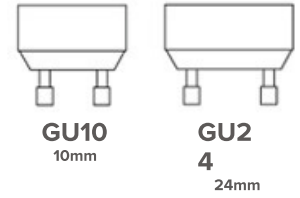


BULB BASE REFERENCE CHART

SCREW



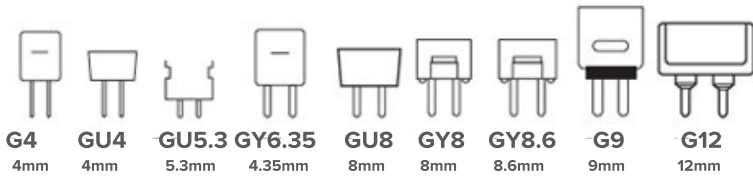
TWIST & LOCK



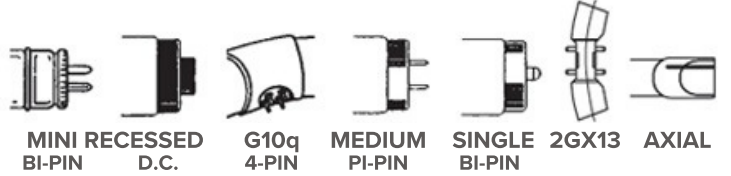
SPECIALTY



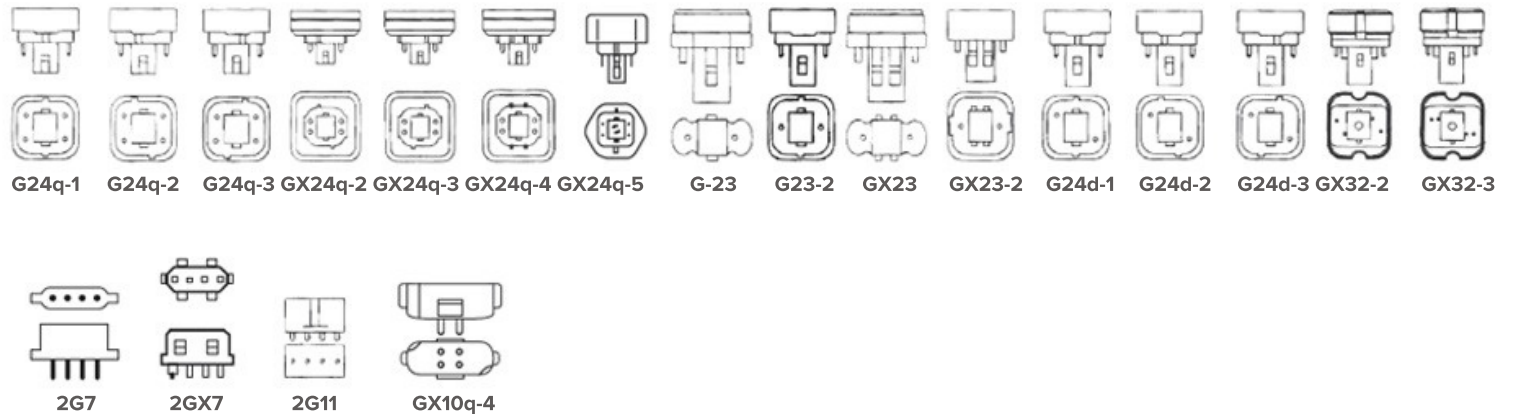
BI PIN



FLUORESCENT PIN



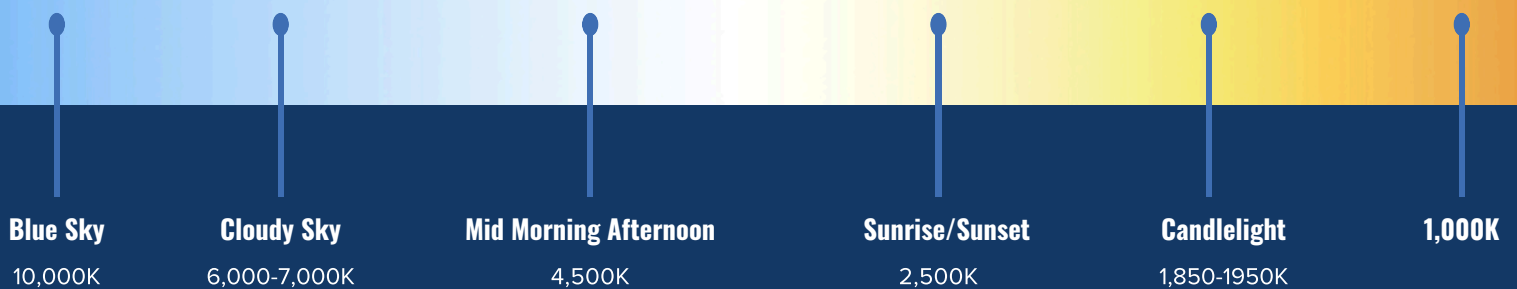
COMPACT FLOURESCENT PLUG IN



Color Temperature

In simple terms, color temperature describes the color characteristics of light. Light used to be created by heating a filament until it glowed. The hotter it got, the color of light it emitted would shift from deep reds to yellows to blues. That's why we describe the character of a light as a temperature. It's based on the temperature at which that color was produced.

The Kelvin scale goes from 1,000K (Glowing Embers) to 10,000K (a bright blue sky). **Light above 5,000K is considered cool, and light below 5,000K is described as warm.**



Your current lights likely don't have a color temperature label, but they might be labeled **cool white**, **daylight**, or **warm white**. Or, if they're incandescent lamps, they probably won't be labeled with a color temperature at all since most are **2700K**. LED lights are offered in a variety of color temperatures (some are even adjustable). When you upgrade to LED, if you want to match the current feel and aesthetic of your current lighting, you'll need to pay attention to the temperature of the new light. **Another color term you might see is CRI (Color Rendering Index)**. A light's CRI rating describes how accurately it displays color.

A higher CRI signifies that a light displays color more accurately, while a lower CRI means the light will shift the way it illuminates some hues. When comparing lamps and fixtures, a higher CRI provides light that's easier on your eyes and aids accuracy in environments where distinguishing between subtle color changes is important. Have you ever had trouble distinguishing between shades of dark blue and black? If so, you've seen the differences between lamps' CRI in action.

The temperature of light effects how we see and feel

3000K

4000K

5000K

5700K



CONDUCTING A LIGHTING AUDIT

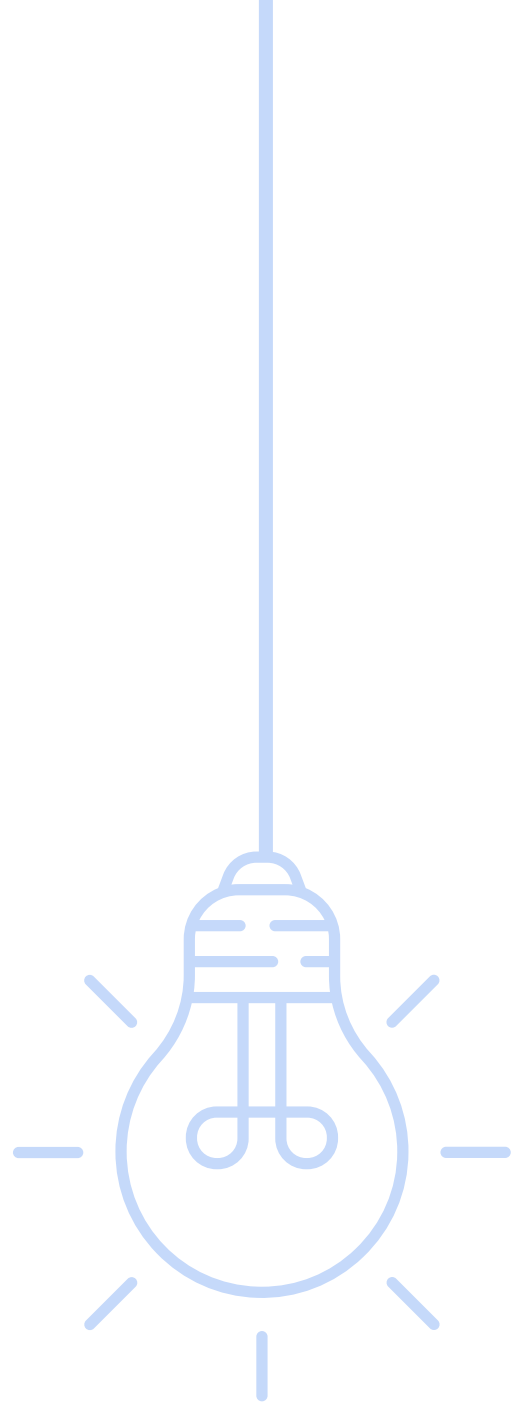
Now that you understand the types of lighting, we'll use your new knowledge to create an audit of each room in your facility.

This audit will ensure your new lighting can be installed easily. If you speak with FSG, we can use this information to calculate the energy savings you can expect with your newer, energy-efficient lighting.

Depending on the size of your facility and your usage, your energy savings won't just be better for the environment; they might just offset the entire cost of your project!

So, not only will your new lighting look and perform better, but it will also improve your facility, and over time, it could pay for itself.

NOTE: LED Lighting has more brightness, color temperature, and dimming capability options than traditional light sources. You'll want to ensure the new LED lighting is right for the task or workspace it's lighting.



STEP 2

ORDER YOUR NEW LIGHTING

Once you've identified the type of lighting in your facility, you can look for replacement LED fixtures or lamps to upgrade your lighting!

This part can get complicated quickly, but don't worry. If you know what you have and what you need the lighting to do, finding an LED lamp or fixture to upgrade to is very doable!

NOTE: LED Lighting has more brightness, color temperature, and dimming capability options than traditional fluorescent lighting. Don't be afraid to get creative or ask for help when choosing LED lighting! Remember, the best lighting is what makes your staff more productive and your patients more comfortable. You're no longer limited to just one or two variations like with fluorescent.

You can even buy LED fixtures that simulate the sun's transition from a cooler color to a warmer color as the day progresses, adding an extra level of comfort for your staff and visitors.

STEP 3

INSTALL YOUR NEW LIGHTING

When your new lighting arrives, it's time to transform your space! If your new lighting involves a small space and only requires installing a few LED lamps, your installation might only mean a few hours on a Saturday.

BUT, if your project involves a large number of lamps over a wide area or involves replacing fixtures, you might want, or be required, to have an installation crew or electricians install your new lighting for you.

Considerations to keep in mind when planning your installation include:

- When can power be turned off for extended periods of time if needed?
- Have you taken all necessary safety precautions?
- Can the project be completed in phases to avoid interruption to facility operations?
- Do you or the installer have a plan for keeping the space clean while working?

We'd love to talk more **about your lighting needs**

FSG has been selling and installing commercial lighting products since 1982. We know you don't just need someone who'll sell you a product. You need a trusted guide to provide the right solution.

There are several variables to consider when building a lighting upgrade project, and this guide has only scratched the surface of the topic. We hope this guide has been a helpful resource in determining if upgrading your lighting is the right solution for you!

Contact our Lighting Guide Team at **(888) 523-3447**.

Let them know where you're located and how we can help you.

Visit us online at [FSG.COM](https://www.fsg.com).

