

# LightFlex™ LED TUBULAR DAYLIGHTING SYSTEM FAQs



Why LightFlex™ LED? What this tubular daylighting system different than the competition?

- ▶ Simplifies design to implement daylight harvesting
- ▶ Provides color uniformity while providing the benefit of natural light throughout the day.
- ▶ Reduces clutter in the ceiling and redundant lighting systems
- ▶ Provide the benefit of tunable-white lighting from 2700k-6500k during “LED-On” mode.

Where can I use the LightFlex LED system?

Focus on interior spaces/areas which do not have access to daylight such as classrooms, repurposed office space, conference rooms, patient waiting areas or retail that have no or limited access to daylight.

Typical applications would occur in new construction or remodel projects where the specifier or end-user desires a means to bring natural light into the space.

How many LightFlex LED systems will I need for my space?

The number of skylights required really depends on the amount of light (footcandles) you require. We can model the appropriate number of skylights for a given calculation through Skycalc based on the footcandle requirement.

How is the lighting for the LightFlex™ LED system controlled?

Integrated nLight® controls enable the sensor, louver and luminaire to adjust, supplement, and maximize natural light and tunable-white LEDs — providing daylight while saving energy throughout the day. The LightFlex™ system works with all existing nLight® switches.

How many LightFlex™ LED systems can be attached to the nLight® controls?

There is no limit to the amount of LightFlex™ LED systems that can be attached to the controls. The limitation would be the size of the daylight zone and the circuit amperage. Each LightFlex™ LED draws 0.6 max amperage.

Can I use the LightFlex™ LED system with other tunable-white luminaires?

Although the LightFlex™ LED is self-sustaining, it can be paired with any nLight® enabled Acuity Brands luminaire with nTune™ technology.

Does the LightFlex™ LED need to be commissioned?

The LightFlex™ LED system is pre-programmed for operation at optimal levels. However, controls programming can be adjusted. The programming guide is available on the product web page under Literature: [LightFlex LED nLight Programming-Guide](#)

Why have tunable lighting?

Circadian lighting through Tunable White supports sleep/wake cycles and can promote an intellectually stimulating learning environment. It is best used in spaces where occupant experience and performance are important, like school classrooms or college campuses.

What are the delivered lumens from the LightFlex™ LED system?

Light levels are dependent on the diffuser option selected, but range from 3,000 to 4,000 delivered lumens on average.

Are there additional diffuser/lens options available?

To ensure daylight is maximized, we have selected diffuser/lens options that allow maximum delivered lumens for this system. Check the specification sheet for updates.

Can LightFlex™ or LightFlex™ LED be used in an open-ceiling application?

LightFlex™ LED is not currently made for open-ceiling applications, however, it can be with minor configuration adjustments. Contact us directly if this is a requested option on your project.

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## TECHNICAL

**What section of the design document does LightFlex™ LED get specified?**

Division 8 (8.60 and 8.62) and Division 26.

**How is the LightFlex™ LED installed?**

Installation instructions for the LightFlex™ LED system are available from the product web page under Instruction Sheets: [Installation Manual\\_SLFTL](#)

**Who in the specification process procures the product?**

This could certainly vary, but as the LightFlex™ LED system is similar to that of a luminaire, it is suggested the electrician procure the product and provide material to the roofer to install. The General Contractor (GC) will have to account for the labor. Of course, depending on the situation, the roofer could procure and the GC could have the electrical contractor install.

**How many connections of power are there in the remote driver box?**

There is one line voltage into the remote driver. If we are talking about low voltage, every cat 5 opening is being used which is why we need the "Y" splitter if the units are being ganged together.

**Can the louver dim?**

No, with nPODM. Yes, with a non-digital switch. Consult factory for details.

**If the building electrical is in 277V, do we need a transformer to step down power?**

The system runs off of a 120VAC circuit. The building electrical may be 277VAC for higher powered units, such as a HVAC system, but there will always be a 120VAC circuit within the building. That said, the LightFlex™ LED should be powered using that circuit.

**Do we need a close loop sensor?**

No. The LightFlex™ LED is controlled using an open loop sensor that it integrated into the system.

**Why do we only need an open loop sensor?**

The LightFlex™ LED system is a combination of daylight and LED luminaire. There is an algorithm build into the design that will read the daylight with the open loop sensor and adjust the LED's accordingly.

**When would I use Productivity Range? Rhythm Range?**

Productivity range is used only to match tunable-white luminaires that also have this range. This is a very small percentage of product. Rhythm range is the default range to use. This provides the option to have tunable lighting from 2700K to 6500K. Most tunable-white luminaires follow this.

**What size is the LightFlex™ LED system?**

The LightFlex™ LED uses a 2' x 2' Signature™ series skylight that attaches to a 21" in diameter highly-reflective tube. The tube is attached to a square transition box that fits seamlessly in a 2' x 2' ceiling grid. The lightwell ranges from 4-foot to 18-foot length depending on application.

**How does a Sunoptics® LightFlex™ tubular daylighting device (TDD) work?**

- ▶ The LightFlex™ tubular daylighting systems from Sunoptics® use our Signature™ series high-performance prismatic skylights to capture more low-angle sunlight than any other passive skylight on the market. It provides glare-free, 100% diffused daylight for more hours and days of the year — in more geographic locations.
- ▶ The LightFlex™ tubular daylighting systems include our proprietary prismatic optic sphere located between the skylight and the roof curb, designed to maximize and drive light deeper into the light well. The light well is made of 98% reflective Alanod® MIRO-SILVER® with greater than 99% specular quality. Optional elbows provide flexibility around plenum obstructions.
- ▶ The LightFlex™ tubular daylighting systems distribute daylight (LightFlex™ and LightFlex™ LED) or tunable-white LED (LightFlex™ LED) or a combination of both (LightFlex™ LED) through a selection of optically-designed diffuser/lens options.
- ▶ Integrated nLight® controls enable the sensor, louver and luminaire to adjust, supplement, and maximize natural light and tunable-white LEDs — providing daylight while saving energy throughout the day.