

LUXFIT™

VARIABLE COLOR

Indoor/Dry Location Series

VIVID COLOR

For an easy-to-control, color-changing, indirect or backlighting solution with a slim, low profile and even illumination, look no further than our frameless **LUXFIT™ RGB LED Light Panels**. This fantastic RGB edge-lit light panel provide smooth light distribution and may be customized for any size or shape with color tuning capabilities when paired with a compatible control or dimmer. Perfect for illuminating compact and narrow spaces, LUXFIT™ maintains an unassuming slim profile, measuring only 11/32" (9mm) fully assembled. LUXFIT™ panels utilize laser-etched dot-pattern technology, allowing face material to be positioned on top with little to no gap while maintaining even illumination.

KEY FEATURES


RGB COLOR

OUTSTANDING BRIGHTNESS

FRAMELESS DESIGN

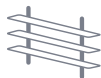
**EVEN LIGHTING
NO DARK SPOTS**

**CUSTOM &
IRREGULAR
SHAPES**

**MULTI-PANEL
ILLUMINATION
BY TILING**

**DAMP
LOCATION
AVAILABLE**

**SLIM & THIN
DESIGN**

**CUSTOM
SIZES**

**ILLUMINATED
SHELVES
& FIXTURES**

**NIGHTCLUB &
RESTUARANT
ILLUMINATION**


Endless RGB color combinations...the only limit is your imagination!

ASSURED QUALITY


E477011

100% QC

**LIMITED
WARRANTY**

E341676

PROJECT NAME/NO.	PART NUMBER
SPECIFIED BY	NOTE

**VARIABLE COLOR**

Indoor/Dry Location Series

MECHANICAL

Max. Panel Size	60" x 120" 1524mm x 3048mm (We recommend 30" or less for max. brightness)	
Acrylic Thickness	Available as $\frac{5}{64}$ " 6mm or $\frac{5}{16}$ " 8mm, depending on project size and application.	
Overall Thickness	Available as $\frac{5}{16}$ " 8mm or $\frac{1}{32}$ " 9mm, depending on project size and application.	
Weight	6mm Acrylic Thickness	2 lbs per sq. ft. 9.77 kg per sq. m.
	8mm Acrylic Thickness	3 lbs per sq. ft. 14.65 kg per sq. m.
Operating Temperature	-22°F to 122°F -30°C to 50°C	
Color Temperature	RGB Full Color Mixing	

CONSTRUCTION & BASE MATERIAL

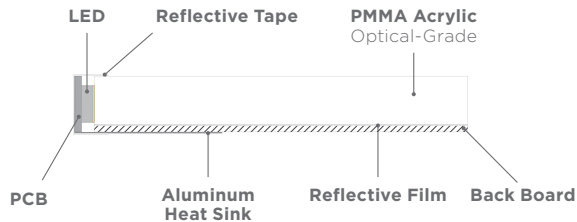
Light Guide Panel Material PMMA Optical Grade Acrylic panel**Reflective Film Material** PET**Heat Sink Material** Aluminum

Construction LUXFIT LED Panels are constructed of a cast PMMA Optical Grade Acrylic panel with a light guide pattern etched uniquely to the acrylic surface. LEDs populate the edges of the acrylic panel. A heat sink and opaque white reflector backer is also provided.

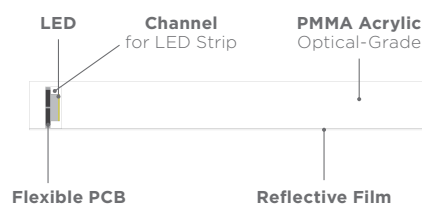
COMPLIANCE & REGULATORY APPROVAL

UL E477011 • cUL E477011 • LUXFIT LED Light Panels are certified as UL listed low voltage luminaires and UL listed sign component. • RoHS • CE • Lead Free • Warranty 3 years

STANDARD PANEL PROFILE



PANEL PROFILE (WITH EMBEDDED LED STRIP)



PROJECT NAME/NO.	PART NUMBER
SPECIFIED BY	NOTE


VARIABLE COLOR

Indoor/Dry Location Series

PHYSICAL CHARACTERISTICS

General Description LUXFIT RGB LED panel luminaires manufactured and provided to the customer by LEDCONN are described as flat LED panels offered with RGB Light Strips powering the panel at the edges. LUXFIT RGB luminaires are also offered with a wide array of dimming and control accessories.

Overall Thickness Light Panel thickness is determined by panel shape, size, and color temperature. The overall thickness of LUXFIT panels shall never exceed $\frac{11}{32}$ " (9mm) fully assembled.

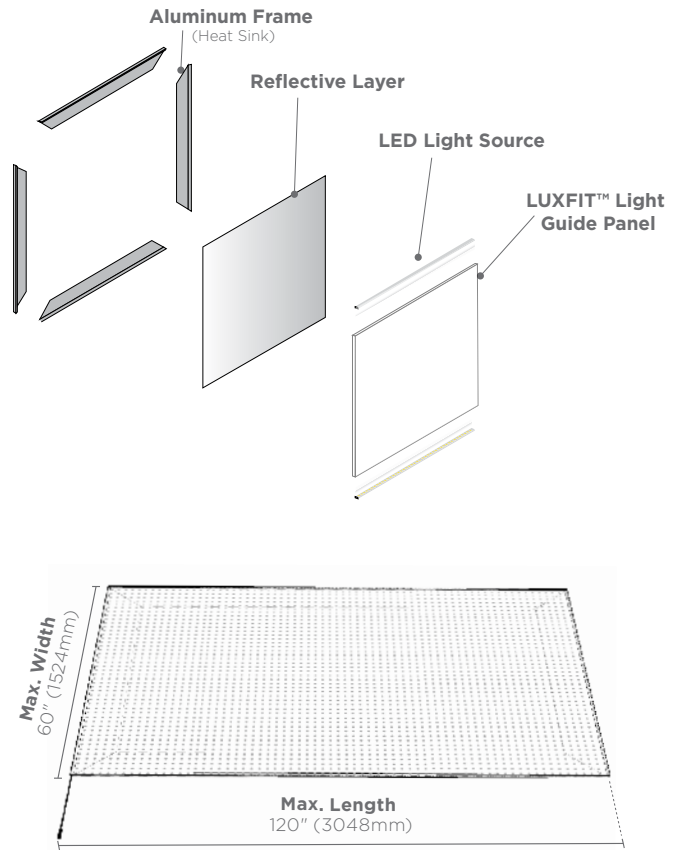
Max. Size The size of any individual LUXFIT LED light panels may not exceed 60" x 120" (1524mm x 3048mm). Multiple LUXFIT LED light panels may be tiled together for grand format illumination applications larger than the product's individual max. size through a technique called Multi-Panel Tiling.

Min. Size LUXFIT LED light panels may be customized for very small applications for any size less than the max. size of 60" x 120" (1524mm x 3048mm).

LUXFIT Light Guide Panel & LED Light Source Each acrylic Light Guide Panel shall be powered by 1, 2, or 4 LED light strips placed on the edge or perimeter of the light panel. Light Guide Panels shall be etched with a unique dot pattern designed to allow light to travel evenly.

Reflective Film LUXFIT LED panels shall require and be provided with a reflective film designed to optimize brightness.

Aluminum Frame Heat Sink LUXFIT LED panels may require and be provided with an integrated heat sink added to the back of the LED light panel, which helps dissipate the build up of thermal energy and prolongs the product lifespan. No additional external cooling is required.



CUSTOMIZATION

Custom Sizes The size of LUXFIT LED panels luminaires may be customized for the design or installation being specified. The maximum size allowed for a panel is 60"x120" (1524mm x 3048mm).

Custom Shapes LUXFIT LED panels can be cut into any desired shape including circles, ovals, and uneven shapes. For details, please consult with a LEDCONN project specialist for more details.

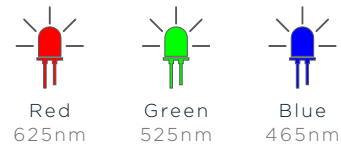
RGB Color Mixing LUXFIT RGB LED panels are compatible with a variety of different controls and dimmers for creative color mixing of custom colors and transitions over a wide color spectrum.

Multi-Panel Tiling Grand format illumination for oversize applications greater than 60"x120" (1524mm x 3048mm) shall be achieved by tiling LUXFIT LED panels together side-by-side. Any tiled light panels shall require an air gap distance of 1" between the illuminated surface and light panel to help the center line of light created at the seam joins.

CUSTOM SHAPES & SIZES



RGB COLORS



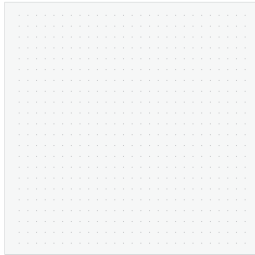
PROJECT NAME/NO.	PART NUMBER
SPECIFIED BY	NOTE


VARIABLE COLOR

Indoor/Dry Location Series

ELECTRICAL

OPTICAL TECHNOLOGY



Introducing Optically Refined Dot Pattern Technology LEDCONN's optically-refined Dot Pattern Technology optimizes the quality of light, producing high brightness and evenness. Its higher yield rate compared to V-cutting technology provides more cost-effective solutions. To distribute the light uniformly, the dots are smaller and widely spread when they are close to the LEDs. Farther away from LEDs, the dots become larger and narrowly spaced.

Faster, Cost-Effective Turnaround With three decades of experience serving the LCD industry, our engineering team has built the optical design software with a database composed of more than 20,000 combination of dimensions and patterns. We can quickly optimize the reflective pattern by filtering parameters in the database, at the same time, reducing development time for custom projects.

PHOTOMETRICS

Lamp Life Standard lamp life of a luminaire typically exceeds 50,000+ hours, which roughly equates to nearly 6 years of constant usage 24 hours a day, 7 days a week, without ever shutting off. LUXFIT light panels require little to no maintenance once installed.

RGB Color Mixing LUXFIT RGB light panels shall be offered with Red, Green and Blue color mixing LED strips.

DIMMING & CONTROLLING

LUXFIT RGB LED light panels dimming options include: Pulse-width modulation dimming (PWM) · DMX/DALI · Remote Control Plugin · Inline Plugin.

POWER SUPPLY

Input Voltage This luminaire shall be equipped and powered by an external 12VDC or 24VDC constant voltage power supply. A variety of dimming controls compatible with the power supply shall be offered for customizable installations.

Power Consumption Shall vary depending on panel size and selected strip configuration. Larger light panels shall require higher power LEDs to maintain evenness in illumination.

Please Use Only with Class 2 Power Supply LEDCONN offers a full range of Class 2 power supplies that are compatible with LUXFIT.

Connector Type The default connector type for this luminaire shall be hardwire connection. Custom connectors including 4-pin connector and Molex® shall be made available upon request.

Wiring in Parallel Multiple LUXFIT light panels may share a single power supply when wired in parallel to the power supply. The number of LUXFIT light panels connected to one power supply is limited by the maximum output capacity of the power supply.

CCT	EFFICACY	BEAM ANGLE	LUMINOUS FLUX	POWER
 RGB	36 lm/W	120°	110.67 lm/ft (363 lm/m)	3.07 W/ft (10.08 W/m)

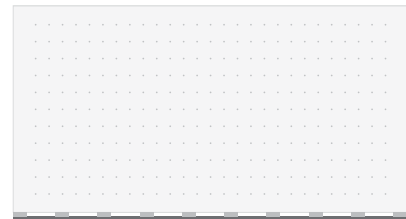
LED STRIP POSITIONING

LED strips utilized to power LUXFIT panels are configurable on all sides of the panel, including long edges, short edges, inside circumference, outside circumference, and custom configurations. LEDs shall be selected for 1-sided, 2-sided, or 4-sided placement with standard or high power LEDs, depending on the application requirements. LED strips may be placed outside of the panel or embedded.

Hotspots Possible dark spotting on edges may appear due to final fixture dimension and LED cutting length and voltage.

1-SIDED LED STRIP ILLUMINATION

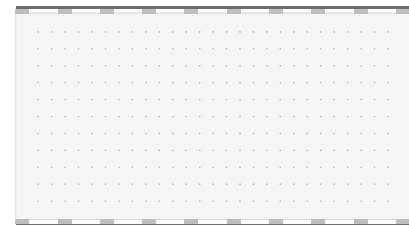
Width **LESS** than
12" (304.8mm)



Max Length 120" (3048mm)

2-SIDED LED STRIP ILLUMINATION

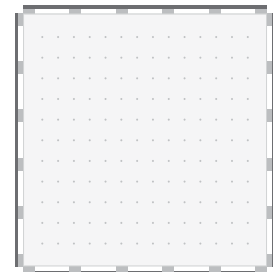
Width **GREATER** than
12" (304.8mm)



Max Length 120" (3048mm)

4-SIDED LED STRIP ILLUMINATION

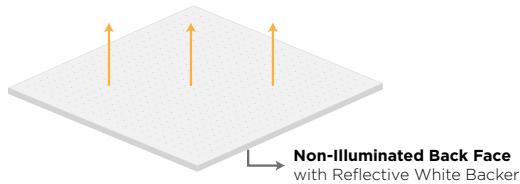
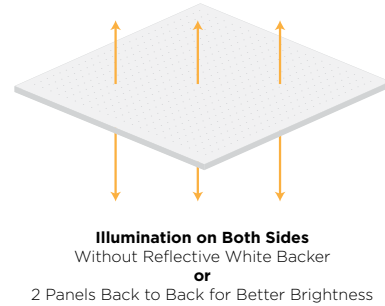
Based on your
application, 4 side
illumination may
be recommended



PROJECT NAME/NO.	PART NUMBER
SPECIFIED BY	NOTE


VARIABLE COLOR

Indoor/Dry Location Series

SINGLE FACE ILLUMINATION

DOUBLE FACE ILLUMINATION

WIRE EXITS

Wire Exit Placement The placement of the primary wire exit shall include corner, side, and rear placement. Wire exit shall be confirmed during the design phase to ensure proper strain relief and maintain product installation integrity. LEDCONN recommends wire exits at any of the 12 locations indicated on the Standard Wire Exit Guide. Outside of recommended standard wire exit locations, custom placements for wire exits may also be accommodated. Any wire exit placements that are requested along a panel's edge with an integrated LED strip may cause dark spots.

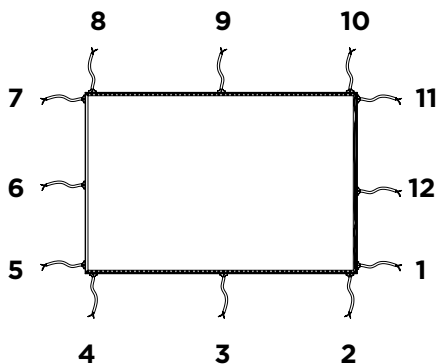
Multiple Wire Exits LUXFIT panels shall also accommodate multiple wire exits if required for the application. Please consult a project coordinator for more consultation about unique wire exit placements.

Cord Length Standard cord lengths shall be 12" (304.8mm), 36" (914.4mm) & 72" (1828.8mm). Wire length may be customized to any desired length for the unique application requirements.

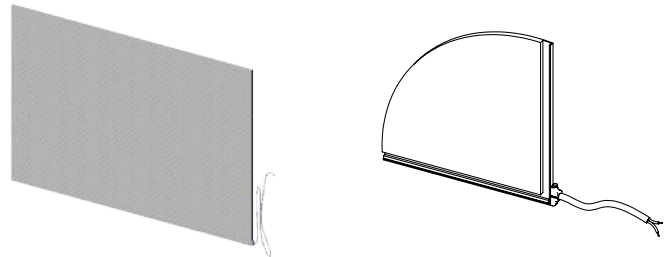
STANDARD WIRE EXIT GUIDE

Choose where you would like to place the wire exit.

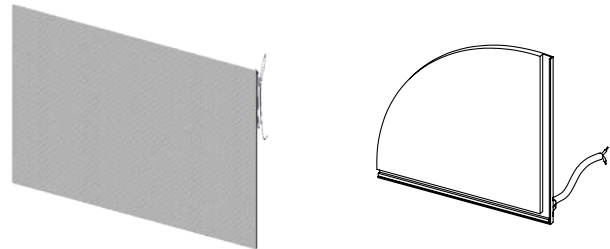
Wire exits 1-12 are the most commonly requested positions.



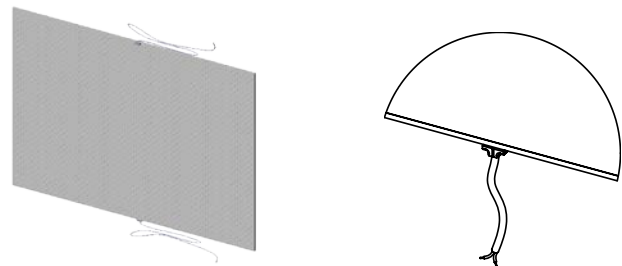
SIDE (EDGE) WIRE EXIT
Max. stopper strain relief: 12lbs.



BACK (REAR) WIRE EXIT



CENTER EDGE WIRE EXIT

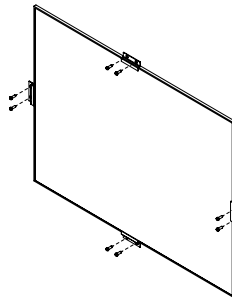


PROJECT NAME/NO.	PART NUMBER
SPECIFIED BY	NOTE

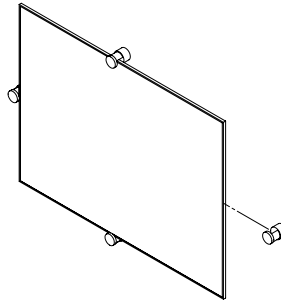
**VARIABLE COLOR**

Indoor/Dry Location Series

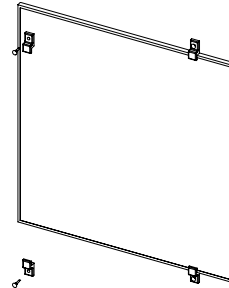
INSTALLATION



ZCLIP



STAND OFF



MIRROR CLIPS

Environment LUXFIT LED light panels shall be used for indoor and dry location applications only. For environments requiring damp location treatment, optional IP65 waterproof treatment is available.

IP65 Outdoor Rating LUXFIT LED panels requested with IP65 damp location treatment shall be dust tight and protect against gentle water contact or humidity. Panels requested for indoor/dry location only are IP22 safe by default.

Operating Temperature LUXFIT LED light panels shall operate in a temperature range of -22°F min to +122°F max (-30°C min to +50°C max).

Heat Sink LUXFIT shall be assembled and distributed with heat sink pre-installed.

Predrilled Holes & Cutouts During production, LUXFIT light panels may be custom ordered with predrilled holes or cut outs.

Drilling On-Site LUXFIT light panels may be drilled on-site but doing so may void the warranty.

Deflection As LUXFIT LED light panels increase in size, they tend to bow more easily. To prevent bowing, additional reinforcements shall be recommended to facilitate handling the needs of larger applications.

Mounting Mounting options for LUXFIT light panels shall include Z clips, stand offs, and mirror clips.

Full Solutions LED Light Boxes For applications requiring a full solution LED light box, we offer SOA state-of-the-art snap frames and Fabric Light Boxes. For more information, please reach out to a Sales Rep or visit us online.

SAFETY DISCLOSURES

Electric Code Compliance Please make sure to install LUXFIT in accordance with standard national and local electrical codes.

Actual Product Color May Vary Please note that the product color as seen in this specification sheet, photography, and related marketing material for this product may vary slightly from your actual customized product due to photographic and design limitations.

Specifications are Subject to Change Without Notice While we try to make every effort to inform customers of updates to our products, we reserve the right to make modifications and improvements to our fixture specifications and designs without advance notice.

Manufacturer is Not Liable for Matching Fixtures to Pre-Existing

Fixture Installations We cannot guarantee matching the CCT appearance, product design, or lumen output for pre-installed fixtures or reorders.

Test Before Installing Always make sure to test out your light panels before installing them. We put our products through a rigorous testing and quality control process to ensure they operate at the highest quality. Even so, we advise that they are inspected prior to permanent installation and tested for proper illumination.

Remove Protective Film Please remove the protective film prior to using the LUXFIT light panel for best performance. To remove any fingerprints, dust, debris, or extraneous substances, use a soft, non-abrasive cloth, applying only minimal pressure to the light panel. Mild soapy water or rubbing alcohol may also be used with the non-abrasive cloth to remove stubborn fingerprints and stains.

Do Not Connect to AC Power LUXFIT panels are not designed for use with AC power. Any direct connection to AC power will damage the LEDs.

Managing Power & Voltage Drop Use of a multi-strand, high strand count wiring is preferred to minimize voltage drop and optimize power distribution for all low voltage DC connections. To manage power distribution and minimize voltage drop, please use the correct recommended wire size and length with the luminaire.

Handle with Care. Light panels are made of acrylic, which makes it very easy for them to become damaged if handled negligently. Always lay the light panel flat against its broadest surface on a surface that will not scratch or damage the acrylic. Exercise caution when handling the panel wiring, which can also be damaged easily. Avoid bending the panel, which should be treated with the same care as a pane of glass. Large light panels will tend to bow, which can damage the LEDs. Exercise caution and provide necessary support for larger panels to prevent bowing.

Storage Please install panels in a clean, dry area where it is difficult for moisture or dust to enter. Maintain an ambient temperature equivalent to room temperature with a mild humidity level for longevity. With exception to damp treated light panels, do not allow the panels to become moist or install in environments prone to moisture to prevent voiding the warranty.

On-Site Drilling and Cutting Although on-site drilling is feasible, doing so may disrupt the evenness of the lighting or create large dark spots depending on the application and nature of the drilled hole or cut out. LEDCONN does not recommend on-site modifications due to compromised lighting performance. Each light panel is fabricated with a unique dot pattern which allows light to travel evenly across that particular light panel. Requesting holes and cut outs during the pre-production specification process will yield far better results than on-site drilling or cutting.

Avoid Using Adhesives Direct bonding of adhesives to the illuminated surface, including single and double-sided adhesives, is not recommended and may disfigure the light panel appearance.

Installation Environment Please keep the installation location and environment in mind when installing the acrylic light panel. Acrylic material will expand and contract in different temperatures and environments, which can create difficulties in mounting and installation. Light panel failure may occur if environmental conditions are not factored into the installation. Please make sure all variables caused by the installation environment have been accounted for prior to installation.

PROJECT NAME/NO.	PART NUMBER
SPECIFIED BY	NOTE



VARIABLE COLOR

Indoor/Dry Location Series

APPLICATIONS

- High-End Residential
- Entertainment & Theater Accent Lighting
- Nightclubs & Restaurants
- Amusement Park Rides & Attractions
- Luminous Ceilings & Walls
- Luminous Shelving
- Backlighting
- Architectural Lighting (Interior & Exterior Design)
- Hospitality Lighting
- Cove Lighting
- Accent Lighting
- Task Lighting
- Custom Retail Fixtures & Displays
- Illuminated Signage & Branding
- Compact, Space-Sensitive Applications
- ...And Many More!



LUXFIT™ RGB LIGHT PANEL PART NUMBER

EXAMPLE

X3040TNH

LUXFIT™

X

PRODUCT
LINE/PROFILE

30" X 40"

3040

DIMENSIONS
WIDTH X LENGTH

RGB

T

COLOR
TEMPERATURE
(CCT)

NON-DIFFUSED

N

NON-DIFFUSED

HARDWIRE

H

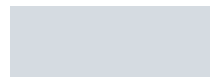
CONNECTOR

OPTIONAL

[]

APPLICATION

BUILD IT!



FOR DAMP LOCATION ONLY!
OMIT IF N/A

PRODUCT LINE

- X** LUXFIT™ CLASSIC
- XG** LUXFIT™ GRAPH
- XC** LUXFIT™ SHAPE
- XR** LUXFIT™ ROUND

COLOR TEMPERATURE (CCT)

- T** TRICOLOR (RGB)
- NON-DIFFUSED**
- N** NON-DIFFUSED

CONNECTOR

- M** MOLEX®
- H** HARDWIRE
- P** 4-PIN
- C** SPECIAL

DIMENSIONS (IN INCHES)

- LLWW** LENGTH X WIDTH (VARIES)

APPLICATION TYPE (OPTIONAL)

- O** DAMP LOCATION
- D** DOUBLE-SIDED
- U** U-CHANNEL

PROJECT NAME/NO.	PART NUMBER
SPECIFIED BY	NOTE