PRODUCT DATA SHEET Page 1

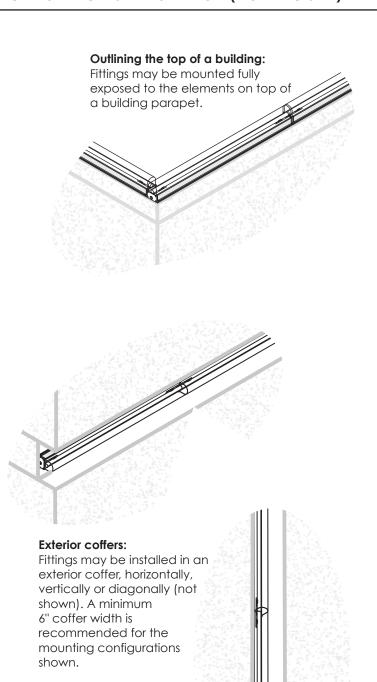
EXTERIOR CATHODE LIGHT STRIP FOR EXPORT Model ECLS-EX

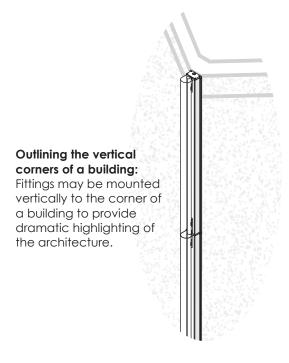


The Exterior Cathode Light Strip combines long-life seamless illumination and the widest choice of fluorescent white and neon colors available in an affordable, weatherproof IP-65 rated luminaire. Easy to install and maintain, and available with a reflector option.







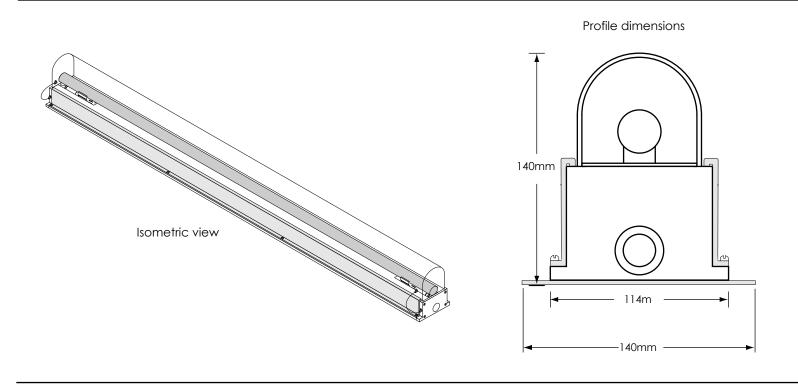


Profile dimensions 5 1/2" 4 1/2" 5 1/2"

Mounting plate width

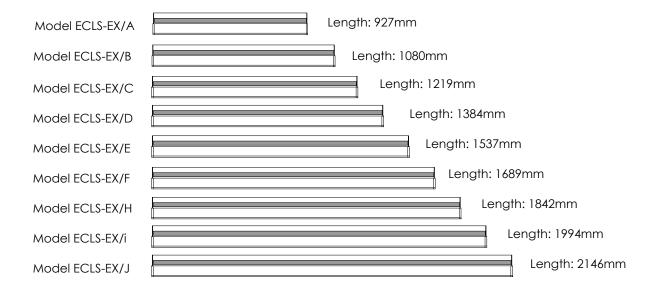
Note: Reflector option does not change the exterior dimensions of this fitting.



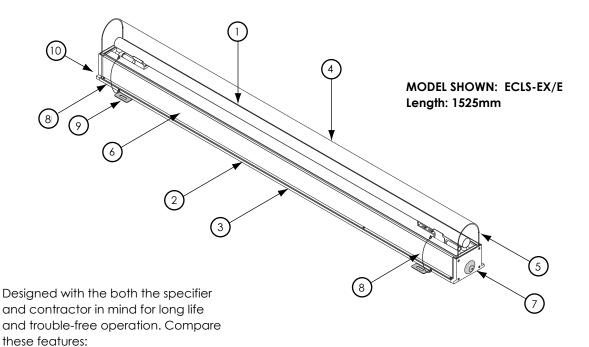


AVAILABLE LENGTHS:

Nine standard lengths are available and may be combined to form any row length from 915mm up to thousands of meters, in 153mm increments.







- 50,000-hour T6 cold cathode lamp inserts and removes vertically from from the concealed lampholders, and are securely locked in place by our exclusive lamp locking clips.
- 2 Integral high-output electronic ballast (not shown) is factory installed within the fixture.
- Aluminum extrusion is heavily anodized for long-term outdoor use.
- UV-stabilized polycarbonate lens is nearly 3.2mm thick and is virtually unbreakable.
- 5 Polycarbonate lens is an ultrasonically welded hermetic barrier. No glued or mechanically assembled joints to leak or degrade over time.

- Lens is held securely in place by two continuous, anodized-aluminum lens retainers. Lens is 100% compressed against the long-life silicone sponge gasket for a bubble-tight seal. Luminaire is IP-65 rated.
- Gasketed conduit holes at each end allow wiring from one luminaire to the next, forming a weatherproof seal.

 Luminaires are provided with weatherproof factory- installed removable plugs at each end.
- 8 Stainless steel safety harnesses assure that cover will remain attached to fixture during installation and service.
- Integral stainless steel mounting brackets allow mounting to virtually any surface.
- All fasteners and related components are made from either corrosion resistant stainless-steel, brass, or anodized aluminum.



SPECIFICATIONS

Fitting: Shall be Cathode Lighting Systems model ECLS-EX. Fitting body shall be .060" satin anodized aluminum. Anodization thickness shall be suitable for long-term outdoor exposure. Luminaire lens shall be 3.2mm UV-stabilized flame-rated polycarbonate, held in place by a continuous anodized-aluminum lens retainer, and shall maintain a weather tight seal via a closed-cell silicone sponge gasket. Lens shall be permanently tethered to the luminaire via two stainless steel safety lanyards. All fasteners within fitting shall be made from corrosion-resistant stainless steel, brass, or aluminum.

IP Rating: Fitting shall carry an IP-65 rating; manufacturer shall supply independent laboratory test results to confirm.

Lamp(s): Shall be 50,000 hour, T6 cold cathode fluorescent, color as specified, with specialty single-pin lamp bases for zero-clearance snap-in installation and removal from lampholders and shall have provisions to be locked into place utilizing the luminaire's lamp-locking clips. Lamps that are hard wired to the power supply are not acceptable alternatives.

Integral Ballast: Shall be 990 volt, high-output electronic, .95 PF, instant start cold cathode, CE approved, and shall automatically de-energize upon removal of lamps from the luminaire.

Approvals: **(€**

Manufacturer: Shall be Cathode Lighting Systems Inc., Gaithersburg, MD - USA Phone: 001-301-921-4120 Website: www:CathodeLightingSystems.com

INSTALLATION RECOMMENDATIONS:

- 1) Confirm "as built" field dimensions with factory.
- 2) Fasteners used to mount the fittings should be stainless steel or other material suitable for long-term outdoor use, and should be capable of supporting 70 kg. for each fastener as recommended by fastener manufacturer. (Cathode Lighting Systems recommends Hilti stainless steel fasteners).
- 3) Installing contractor will be responsible for making weather tight any fasteners used to mount the fittings that penetrate an exterior building membrane, trim cap or finish.
- 4) Fittings are weather tight; installation shall be performed under dry weather conditions. It is imperative that moisture does not enter the internal compartments of the fitting during the lens and cover removal phase required for installation.
- 5) Fittings and ballasts are not protected from lighting strikes. Please consult with a lightning protection manufacturer.



ELECTRICAL INFORMATION

Brightness Type	Primary voltage	Primary amps / VA	Watts per meter*
High Output	230 volts / 50 Hz	.4 amps / 92 VA	40.3
Standard Output	230 volts / 50 Hz	.22 amps / 51 VA	22.3

^{*}Values are based on all fitting lengths at 2134 mm. Actual values may vary depending upon selected fitting lengths.

ENVIRONMENTAL INFORMATION

TEMPERATURE RANGE:

-12°C to 38°C. Lamps will not acheive full brightness at temperatures below 0°C.

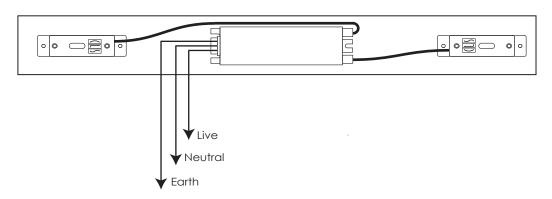
COLD WEATHER OPERATION:

It is recommended that in the coldest winter months, the lamps should be allowed to burn continuously. Please consult factory for use of this product in locations in which long-term ambient temperatures are below -12°C.

HOT WEATHER OPERATION:

It is recommended that in hot climates, the fixtures be operated on a timed cycle, or by photocell operation, and only be turned on in the cooler evening hours.

TYPICAL BALLAST WIRING DIAGRAM (MODEL ECLS-EX)



Wiring is extremely simple. Each fitting is supplied from the factory prewired. Installation and primary wiring must be performed by a licensed electrician.



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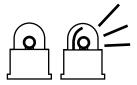


ENGINEERED & RATED FOR THE MOST DEMANDING OUTDOOR ENVIRONMENTS

Fittings are CE approved and carry an IP-65 rating. They are equipped with modern, quiet, high-output electronic ballasts, and are completely sealed from the elements. They are designed to function perfectly in direct exposure to sun, rain, snow, hail, and high winds.

REFLECTOR OPTION

Fittings are supplied standard without a reflector, but may be supplied with an optional assymetric specular reflector. The reflector not only provides a substantial throw of the light, but also gives the appearance of a very wide band of illumination.





ULTRA LONG LAMP LIFE

Lamp life is externely long, often in excess of 50,000 hours.

SEAMLESS ILLUMINATION

Utilizing specially manufactured ultra long-life cold cathode lamps, fittings are illuminated completely from end to end. When installed, they create the appearance of one continuous uniterrupted line of light.





HEAVY-DUTY CONSTRUCTION

Fittings are manufactured from heavily-anodized satin-aluminum extrusion. The unbreakable transparent polycarbonate lens completely protects the lamp and the interior of the fitting from any moisture, flying debris, insects and other harsh environmental factors.



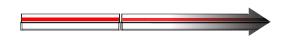
WIDE SELECTION OF HIGH LUMEN LAMP COLORS

Lamps may be ordered in six different shades of white and a wide variety of brilliant pastel and neon colors up to 2558 lumens per meter - brightness levels that neon, fiber optic and LED light sources cannot match.

LOW PROFILE

Fitting profile is compact - only 114 mm wide and 140 mm tall.



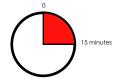


STANDARDIZED FITTINGS CAN BE COMBINED TO ILLUMINATE VIRTUALLY ANY ROW LENGTH

Individual fittings come in lengths from 915 mm to 2134 mm in increments of 152 mm. They may be combined to form any row length from 915 mm to thousands of meters. Standardized fitting lengths translate into off-the-shelf convenience when specifying and ordering.

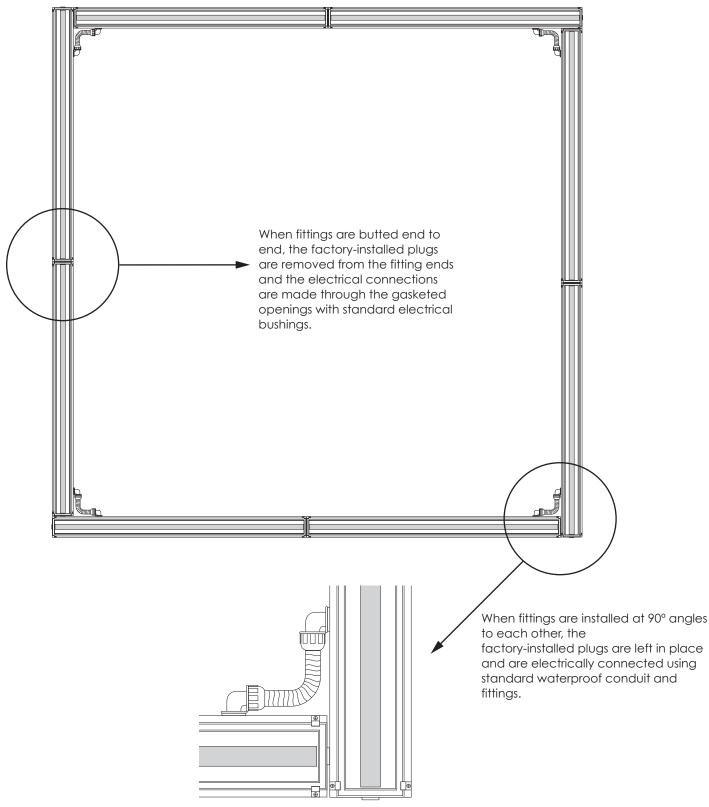
SIMPLE INSTALLATION & LOW MAINTENANCE

Fittings are shipped from the factory preassembled, install quickly and are essentially maintenance-free.



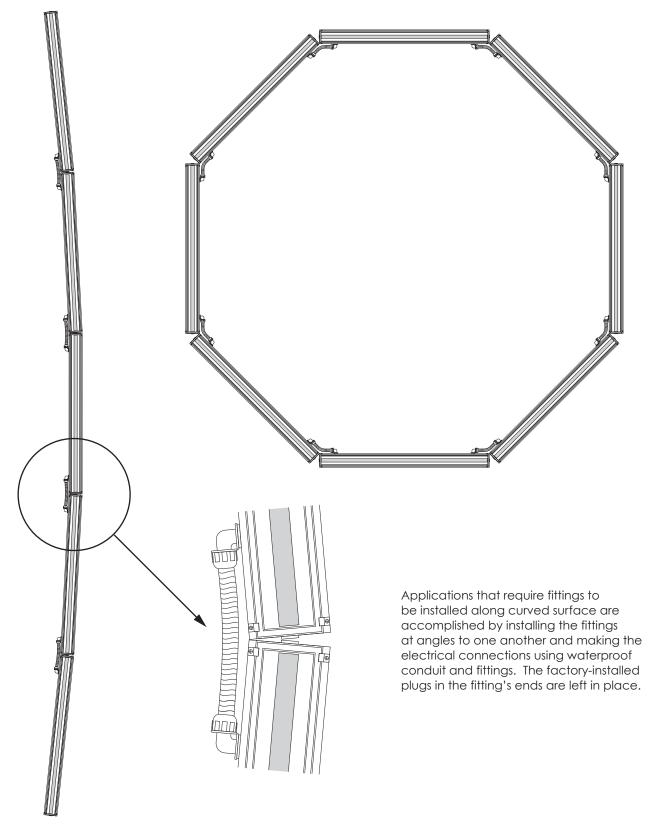


LINEAR AND RECTILINEAR APPLICATIONS





APPLICATIONS REQUIRING CURVES, POLYGONS OR OTHER NON-RECTILINEAR SHAPES





LAMP COLORS

WHITE LAMPS (All whites are triphosphor with a CRI of 92+)

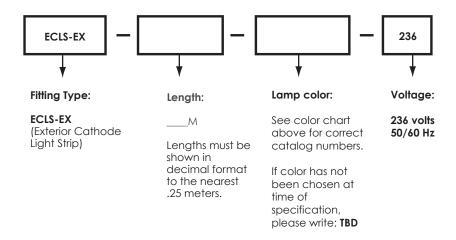
Cat. No.	Shade of White	Lumens per meter	Efficacy
28TC	Incandescent - 2800°K	2532	72.2 lumens/watt
30TC	Warm white - 3000°K	2490	76.2 lumens/watt
35TC	Soft white - 3500°K	2558	78.2 lumens/watt
42TC	Cool white - 4200°K	2460	75.3 lumens/watt
50TC	Ice white - 5000°K	2421	73.2 lumens/watt
65TC	Daylight - 6500°K	2460	75.4 lumens/watt

Photometric information: All photometric values provided by LTL (Luminaire Testing Laboratories, Allentown, PA).

COLORED LAMPS:

Pink White (PW) Hot Pink (HP) Red (RD) Lavender (LV) Purple (PR) Sky Blue (SB) Deep Blue (DB) Turquoise (TQ) Aquamarine (AQ) Standard Green (GR) Bright Green (BG) Gold (GD) Canary Yellow (CY) Orange (OR) Amber (AM)

ORDERING INFORMATION



Example: One row of ECLS 80.5 meters long. Lamp color is 2800°K Incandescent white, 236 volt operation

