

EXTERIOR CATHODE LIGHT STRIP (Model ECLS)

UL US LISTED
 Patent 7,293,895
 Patent 6,454,431



Photo: Eric Long



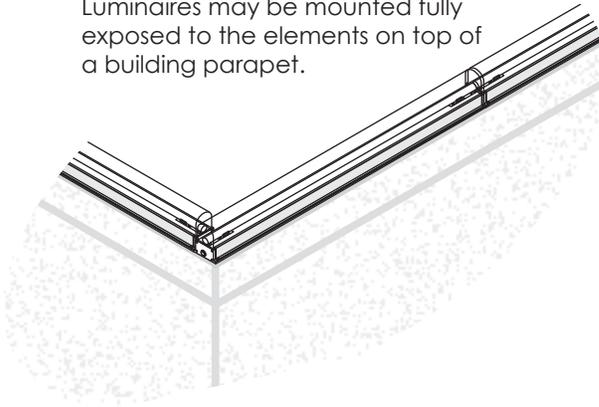
The Exterior Cathode Light Strip combines long-life seamless illumination and the widest choice of fluorescent white and neon colors available in an affordable, weatherproof IP-65 rated luminaire. Easy to install and maintain, and available with a reflector option.

EXTERIOR CATHODE LIGHT STRIP (MODEL ECLS)

TYPICAL APPLICATIONS & MOUNTING CONFIGURATIONS

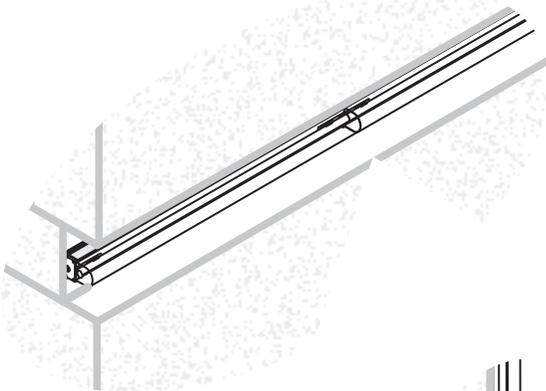
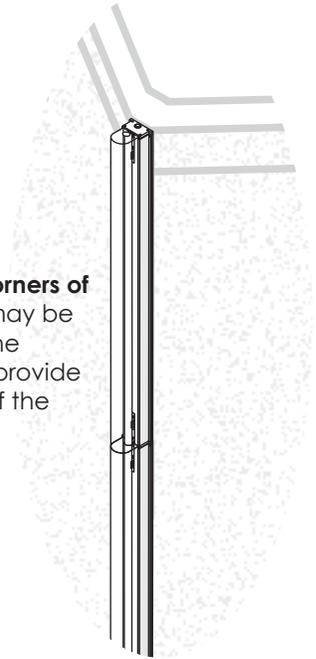
Outlining the top of a building:

Luminaires may be mounted fully exposed to the elements on top of a building parapet.



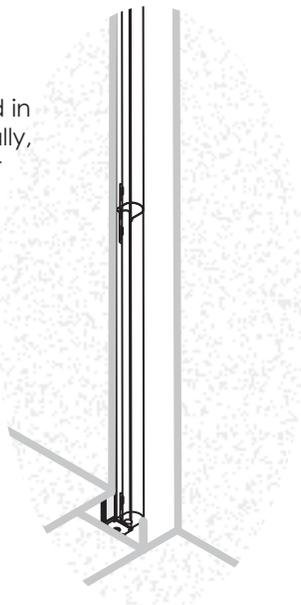
Outlining the vertical corners of a building:

Luminaires may be mounted vertically to the corner of a building to provide dramatic highlighting of the architecture.

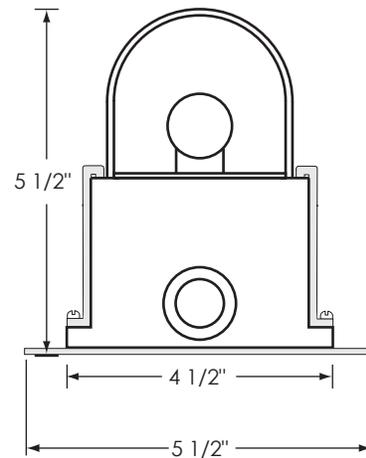


Exterior coffer:

Luminaires may be installed in an exterior coffer, horizontally, vertically or diagonally (not shown). A minimum 6" coffer width is recommended for the mounting configurations shown.



Profile dimensions

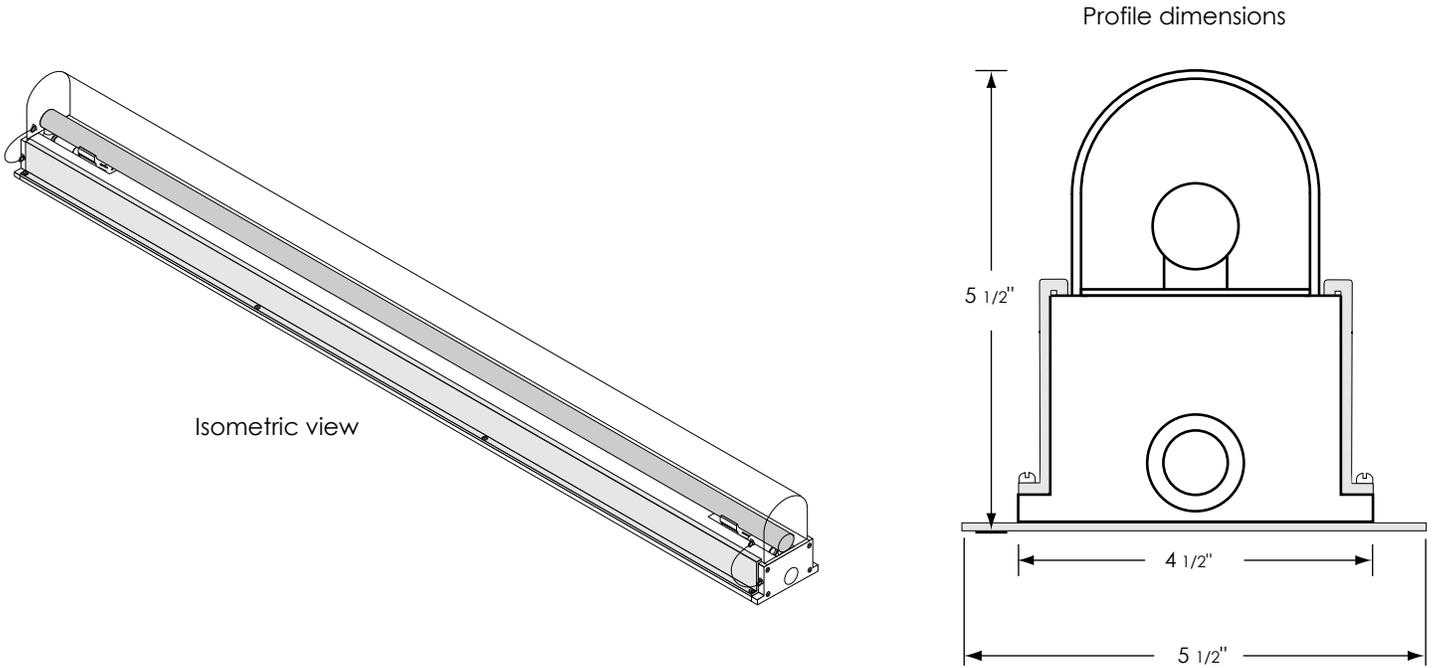


Mounting plate width

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

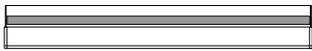
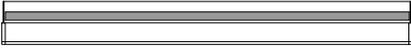
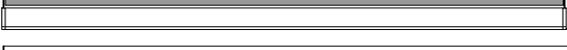
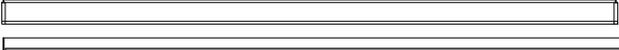
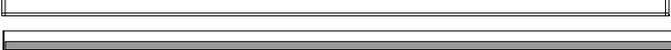
EXTERIOR CATHODE LIGHT STRIP (MODEL ECLS)

DIMENSIONAL INFORMATION



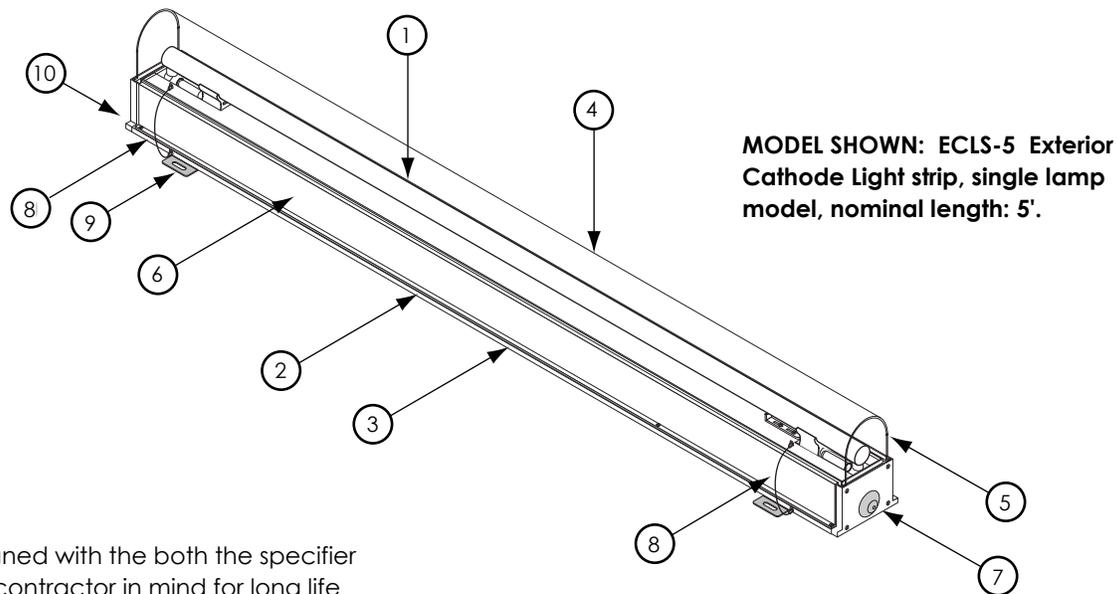
LUMINAIRE SIZE AVAILABILITY:

Nine standard lengths are available and may be combined to form any row length from three feet up to thousands of feet, in six inch increments.

Model ECLS-3		Actual fixture length: 36.5 inches
Model ECLS-3.5		Actual fixture length: 42.5 inches
Model ECLS-4		Actual fixture length: 48.5 inches
Model ECLS-4.5		Actual fixture length: 54.5 inches
Model ECLS-5		Actual fixture length: 60.5 inches
Model ECLS-5.5		Actual fixture length: 66.5 inches
Model ECLS-6		Actual fixture length: 72.5 inches
Model ECLS-6.5		Actual fixture length: 78.5 inches
Model ECLS-7		Actual fixture length: 84.5 inches

EXTERIOR CATHODE LIGHT STRIP (MODEL ECLS)

ENGINEERING FEATURES



Designed with the both the specifier and contractor in mind for long life and trouble-free operation. Compare these features:

- ① 50,000-hour T6 cold cathode lamp inserts and removes vertically from the concealed lampholders, and are locked securely in place by our exclusive lamp locking clips.
- ② Integral high-output electronic ballast (not shown), is factory installed within the fixture.
- ③ Aluminum extrusion is heavily anodized for long-term outdoor use.
- ④ UV-stabilized polycarbonate lens is nearly 1/8" in thickness 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.
- ⑥ 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.
- ⑦ 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.
- ⑨ Integral stainless steel mounting brackets allow mounting to virtually any surface.
- ⑩ All fasteners and related components are made from either corrosion resistant stainless-steel, brass, or anodized aluminum.

SPECIFICATIONS

Luminaire: Shall be Cathode Lighting Systems model ECLS (Exterior Cathode Light Strip). Luminaire body shall be .060" satin anodized aluminum. Anodization thickness shall be suitable for long-term outdoor exposure. Luminaire lens shall be .100" 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 luminaire shall be made from corrosion-resistant stainless steel, brass, or aluminum.

IP Rating: Luminaire 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, class P thermally protected, type 1 outdoor, sound rated A and shall automatically de-energize upon removal of lamps from the luminaire.

Approvals: Luminaire shall be UL and cUL listed under UL category: IEUZ Fluorescent surface mounted luminaire, shall be listed suitable for WET LOCATIONS, and shall be listed for mounting in any orientation. Damp-location listed luminaires are not acceptable alternatives.

Manufacturer: Shall be Cathode Lighting Systems Inc., Gaithersburg, MD - USA (800) 551-5012.

Website: www.CathodeLightingSystems.com

INSTALLATION RECOMMENDATIONS:

- 1) Confirm "as built" field dimensions with factory prior to luminaire fabrication.
- 2) Fasteners used to mount the luminaires should be stainless steel or other material suitable for long-term outdoor use, and should be capable of supporting 150 lbs. 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 luminaires which penetrate an exterior building membrane, trim cap or finish.
- 4) Luminaires are weather-tight; installation shall be performed under dry weather conditions. It is imperative that moisture does not enter the internal compartments of the luminaire during the lens and cover removal phase required for installation.
- 5) Luminaires and ballasts are not protected from lightning strikes. Please consult with a lightning protection manufacturer.

EXTERIOR CATHODE LIGHT STRIP (MODEL ECLS)

ELECTRICAL INFORMATION & WIRING DIAGRAM

Electrical Loading Information Model ECLS

No. of Luminaires	Length Range	Primary amperage @ 120 & 277 volts
1	3 feet through 7 feet:	.7 amps @ 120 volts / .35 amps @ 277 volts
2	7.5 feet through 14 feet:	1.4 amps @120 volts / .7 amps @277 volts
3	14.5 feet through 21 feet:	2.1amps @120 volts / 1.1 amps @277 volts
4	21.5 feet through 28 feet:	2.8 amps @120 volts / 1.4 amps @ 277 volts
5	28.5 feet through 35 feet:	3.5 amps @120 volts / 1.8 amps @ 277 volts
6	35.5 feet through 42 feet:	4.2 amps @120 volts / 2.1 amps @ 277 volts
7	42.5 feet through 49 feet:	4.9 amps @ 120 volts / 2.5 amps @ 277 volts
8	49.5 feet through 56 feet:	5.6 amps @ 120 volts / 2.8 amps @ 277 volts
9	56.5 feet through 63 feet:	6.3 amps @ 120 volts / 3.2 amps @ 277 volts
10	63.5 feet through 70 feet:	7 amps @ 120 volts / 3.5 amps @ 277 volts
11	70.5 feet through 77 feet:	7.7 amps @120 volts / 3.9 amps @ 277 volts
12	77.5 feet through 84 feet:	8.4 amps @ 120 volts / 4.2 amps @ 277 volts
13	84.5 feet through 91 feet:	9.1 amps @120 volts / 4.6 amps @ 277 volts
14	91.5 feet through 98 feet:	9.8 amps @120 volts / 4.5 amps @ 277 volts
15	98.5 feet through 105 feet:	10.5 amps @ 120 volts / 5.3 amps @ 277 volts
16	105.5 feet through 112 feet:	11.2 amps @ 120 volts / 5.6 amps @ 277 volts
17	112.5 feet through 119 feet:	11.9 amps @ 120 volts / 6 amps @ 277 volts
18	119.5 feet through 126 feet:	12.6 amps @ 120 volts / 6.3 amps @ 277 volts
19	126.5 feet through 133 feet:	13.3 amps @ 120 volts / 6.7 amps @ 277 volts
20	133.5 feet through 140 feet:	14 amps @ 120 volts / 7 amps @ 277 volts
21	140.5 feet through 147 feet:	14.7 amps @ 120 volts / 7.4 amps @ 277 volts
22	147.5 feet through 154 feet:	15.4 amps @ 120 volts / 7.7 amps @ 277 volts

TEMPERATURE RANGE:

10°F to 100°F. Lamps will not acheive full brightness a temperatures below 32°F.

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 10°F.

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.

ELECTRICAL INFORMATION:

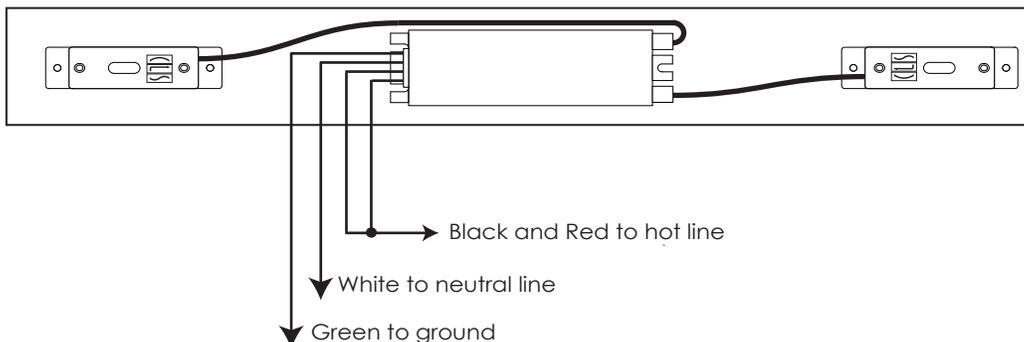
This chart reflects electrical loading characteristics for fixture type ECLS (single lamp).

MAXIMUM LUMINAIRES PER 20-AMP CIRCUIT:

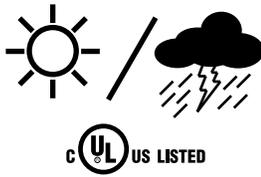
11 @ 120 volts
22 @ 277 volts

TYPICAL BALLAST WIRING DIAGRAM - MODEL ECLS

WIRING DIAGRAM (120 or 277 volt operation)



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

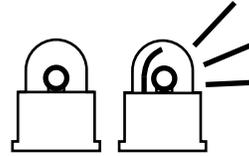


ENGINEERED & RATED FOR THE MOST DEMANDING OUTDOOR ENVIRONMENTS

Luminaire is UL and cUL listed for wet outdoor locations, and carries an IP-65 rating. They are equipped with modern, quiet, high-output electronic ballasts, and they 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

Luminaires 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.

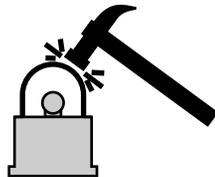


ULTRA LONG LAMP LIFE

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

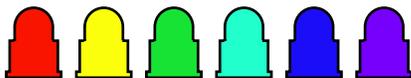
SEAMLESS ILLUMINATION

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



HEAVY-DUTY CONSTRUCTION

Luminaires are manufactured from heavily-anodized satin-aluminum extrusion. The unbreakable transparent polycarbonate lens completely protects the lamp and the interior of the luminaire 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 780 lumens per foot: brightness levels that neon, fiber optic and LED light sources cannot match.

LOW PROFILE

Luminaire profile is compact - only 4.5 inches wide and 5.5" tall.

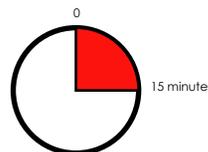


STANDARDIZED LUMINAIRES CAN BE COMBINED TO ILLUMINATE VIRTUALLY ANY ROW LENGTH

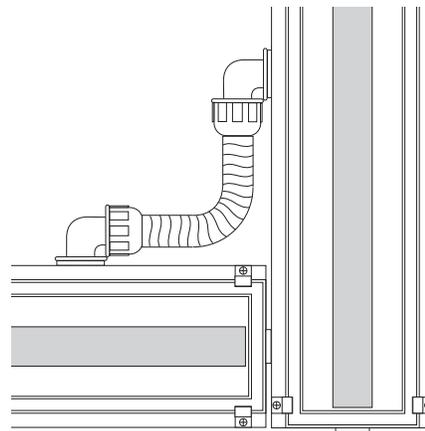
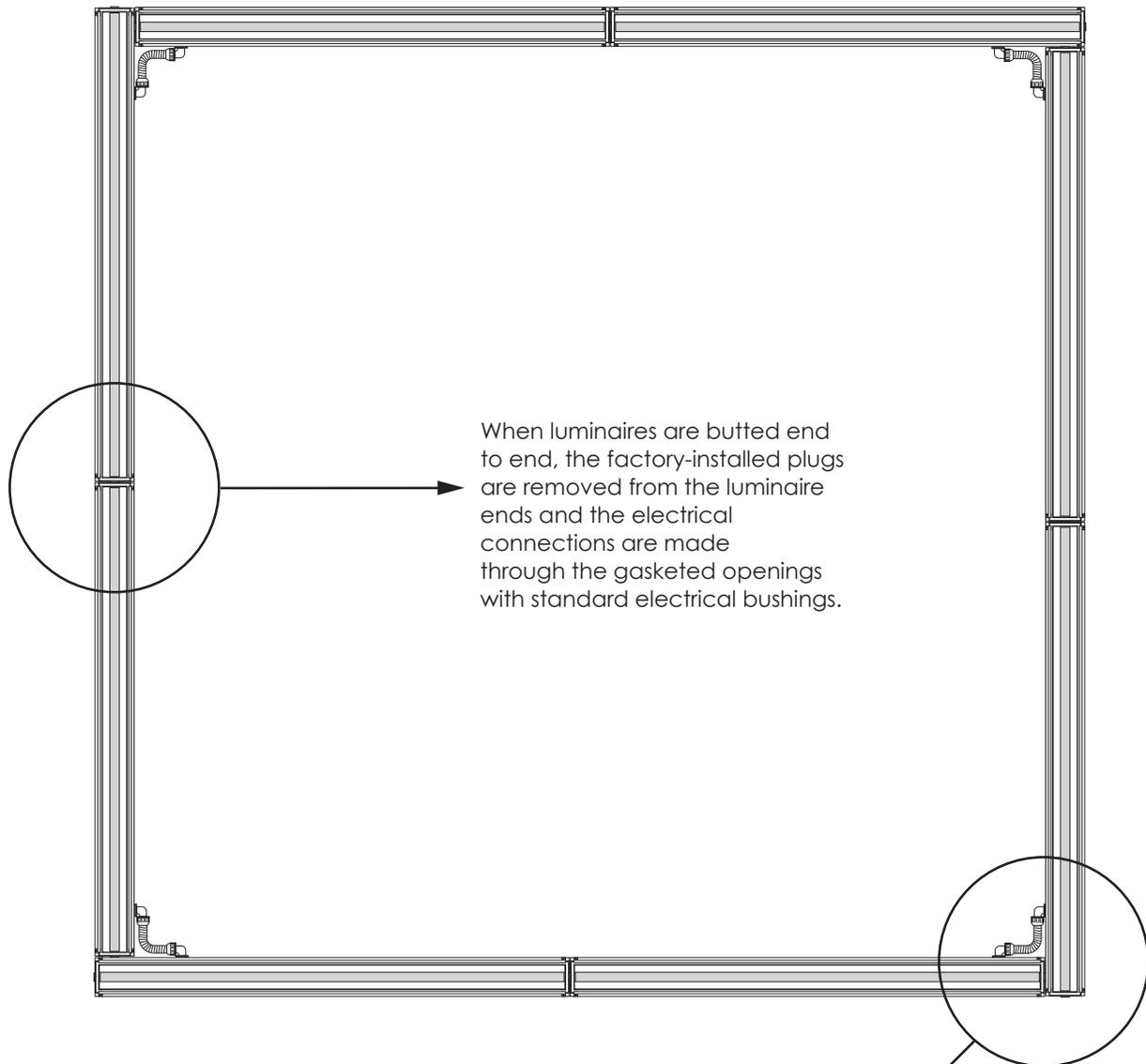
Individual luminaires come in lengths from 3 feet to 7 feet in increments of six inches. They may be combined to form any row length from 3 feet to thousands of feet. Standardized luminaire lengths simplify specification.

SIMPLE INSTALLATION & LOW MAINTENANCE

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

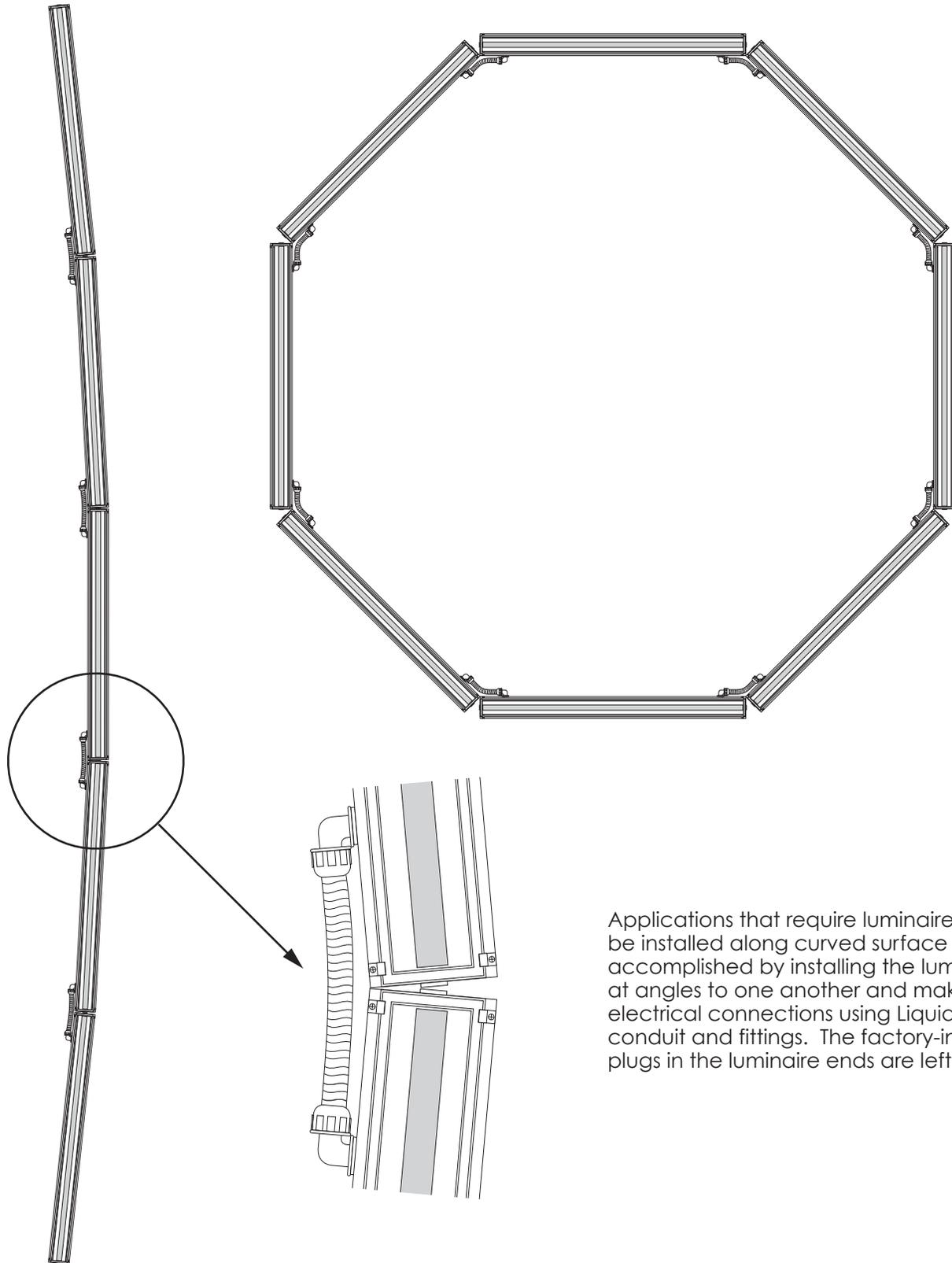


LINEAR AND RECTILINEAR APPLICATIONS



When luminaires are installed at 90° angles to each other, the factory-installed plugs are left in place and the luminaires are electrically connected using standard Liquid-Tight® conduit and fittings.

APPLICATIONS REQUIRING CURVES, POLYGONS OR OTHER NON-RECTILINEAR SHAPES



Applications that require luminaires to be installed along curved surface are accomplished by installing the luminaires at angles to one another and making the electrical connections using Liquid-Tight® conduit and fittings. The factory-installed plugs in the luminaire ends are left in place.

EXTERIOR CATHODE LIGHT STRIP (MODEL ECLS)

LAMP COLORS & ORDERING INFORMATION

LAMP COLORS

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

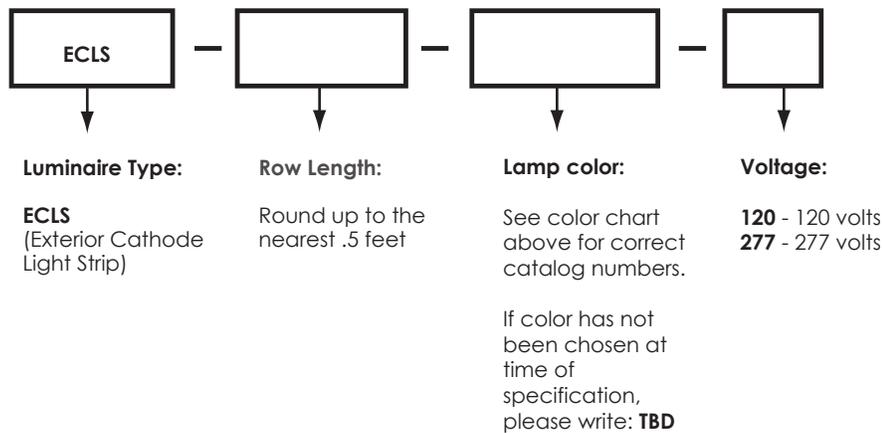
Cat. No.	Shade of White	Lumens per foot	Efficacy
28TC	Incandescent - 2800°K	772	72.2 lumens/watt
30TC	Warm white - 3000°K	759	76.2 lumens/watt
35TC	Soft white - 3500°K	780	78.2 lumens/watt
42TC	Cool white - 4200°K	750	75.3 lumens/watt
50TC	Ice white - 5000°K	738	73.2 lumens/watt
65TC	Daylight - 6500°K	751	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' 6" long. Lamp color is 2800°K Incandescent white. Luminaires will operate at 120 volts.

