

EXTERIOR CATHODE LIGHT STRIP

Exterior Wet-Location Modular Cold Cathode Fluorescent Fixture • Models: ECLS & ECLSD



Lincoln Properties Tyson's Corner, Virginia

Photo: Eric Long

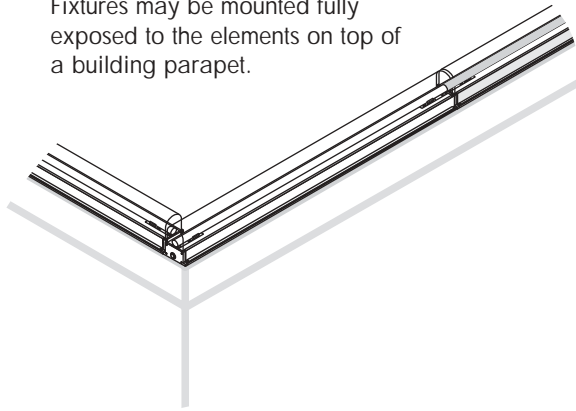


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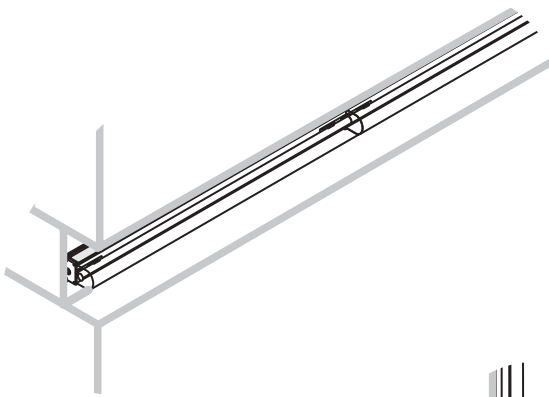
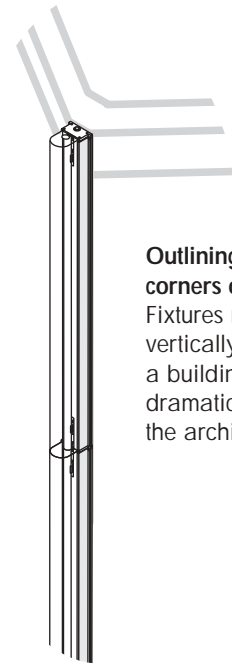
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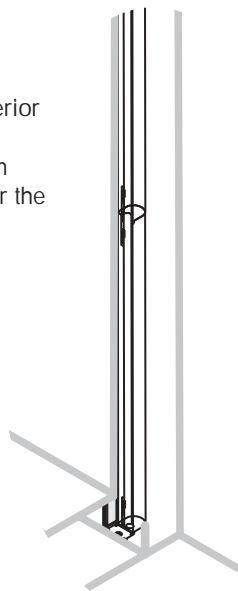
Outlining the top of a building:
 Fixtures may be mounted fully exposed to the elements on top of a building parapet.



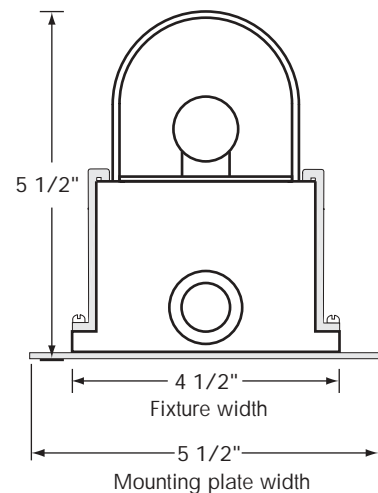
Outlining the vertical corners of a building:
 Fixtures may be mounted vertically to the corner of a building to provide dramatic highlighting of the architecture.



Exterior coffers:
 Fixtures 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.

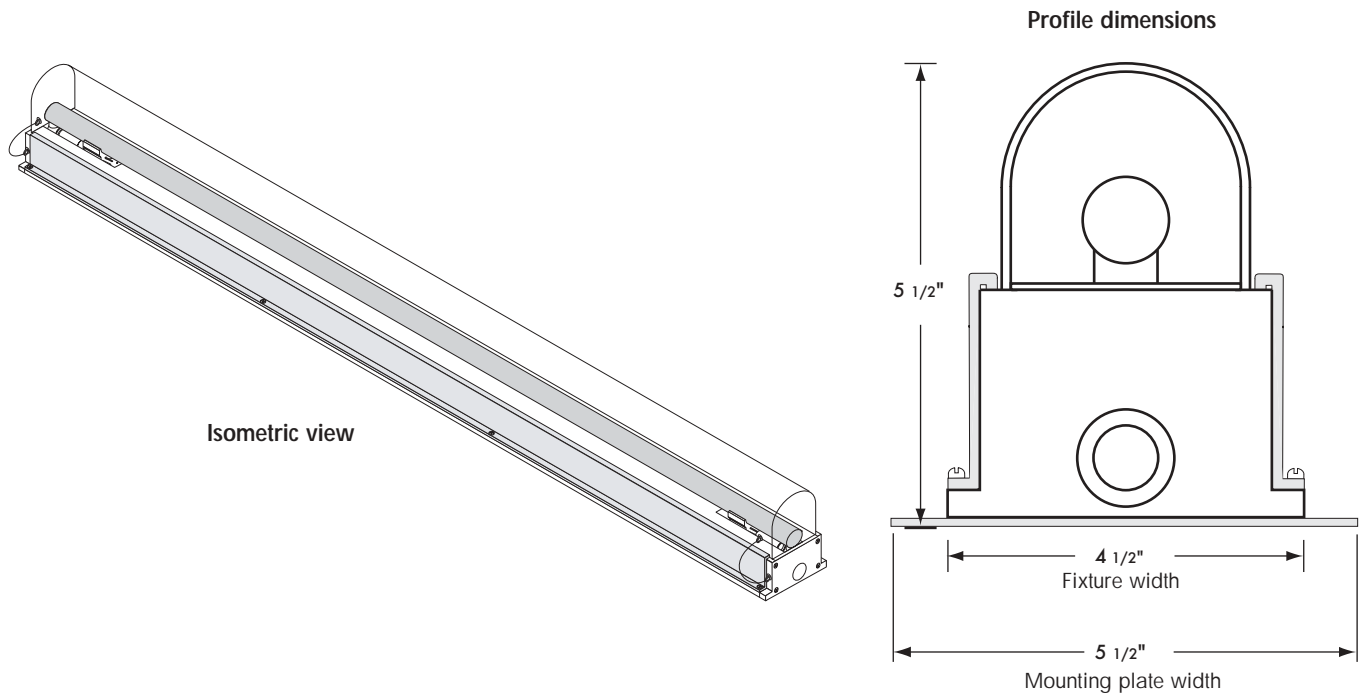


Profile dimensions











The dimensions shown above are identical for any of the exterior cathode light strip models. ECLS (Single lamp, with or without reflector) and ECLSD (double lamp).



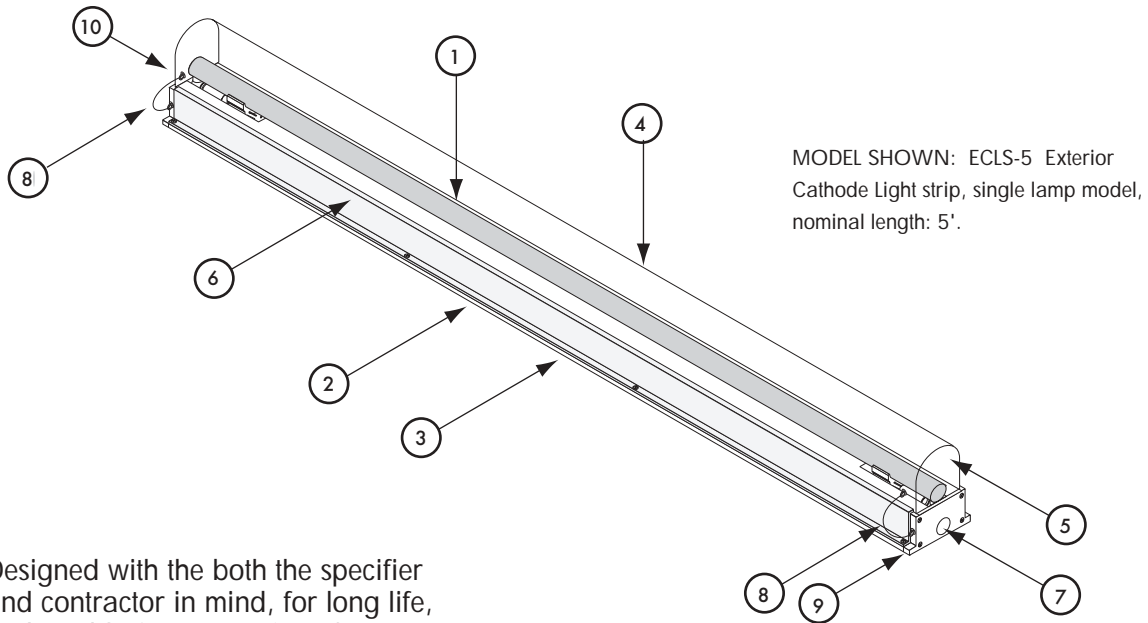


FIXTURE SIZE AVAILABILITY:

Eight standard fixture lengths are available and may be combined to form any row length from four feet, to thousands of feet, in six inch increments.

Model ECLS-4		Actual fixture length: 4' 1/2" (48.5 inches)
Model ECLS-4.5		Actual fixture length: 4' 6 1/2" (54.5")
Model ECLS-5		Actual fixture length: 5' 1/2" (60.5")
Model ECLS-5.5		Actual fixture length: 5' 6 1/2" (66.5")
Model ECLS-6		Actual fixture length: 6' 1/2" (72.5")
Model ECLS-6.5		Actual fixture length: 6' 6 1/2" (78.5")
Model ECLS-7		Actual fixture length: 7' 1/2" (84.5")
Model ECLS-7.5		Actual fixture length: 7' 6 1/2" (90.5")





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

- ① 50,000-hour bi-pin 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 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.
- ⑦ Fixture ends contain a gasketed hole which neatly attaches to the next fixture to form a weatherproof seal. Fixtures 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 18-8 stainless-steel, brass, or anodized aluminum.



SPECIFICATIONS:

Fixture: Fixture shall be Cathode Lighting Systems model ECLS (Exterior Cathode Light Strip - single lamp) or model ECLSD (Exterior Cathode Light Strip - double lamp). Fixture body shall be .060" satin anodized aluminum. Anodization thickness shall be suitable for long-term outdoor exposure. Fixture 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 fixture via two stainless steel safety lanyards. All fasteners within fixture shall be made from corrosion-resistant stainless steel, brass, or aluminum.

Lamp(s): Shall be 50,000 hour, 25mm cold cathode fluorescent, color as specified, with bi-pin bases for zero-clearance snap-in installation and removal into listed lampholders. Lamps shall be manufactured with integral bi-pin bases and will have provisions to be locked into place utilizing the fixture's lamp-locking clips. Lamps which are hard wired to the power supply are not acceptable alternatives

Integral Ballast: Shall 900 volt, 100 mA 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 fixture.

Approvals: Fixture 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 fixtures are not acceptable alternatives.

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

Website: [www:CathodeLightingSystems.com](http://www.CathodeLightingSystems.com)

INSTALLATION RECOMMENDATIONS:

- 1) Confirm "as built" field dimensions with factory prior to fixture fabrication.
- 2) Fasteners used to mount the fixtures should be of 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 fasteners).
- 3) Installing contractor will be responsible for making weather tight, any fasteners used to mount the fixtures which penetrate an exterior building membrane, trim cap or finish.
- 4) Fixtures are weather tight, installation shall be performed under dry weather conditions. It is imperative that moisture does not enter the internal compartments of the fixture during the lens and cover removal phase required for installation.
- 5) Fixtures and ballasts are not protected from lightning strikes, please consult with a lightning protection manufacturer.



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**ELECTRICAL LOADING INFORMATION
MODEL ECLS (Single Lamp Fixture)**

4 feet through 7.5 feet:	102 VA / .9 amps
8 feet through 15 feet:	204 VA / 1.7 amps
15.5 feet through 22.5 feet:	306 VA / 2.6 amps
23 feet through 30 feet:	408 VA / 3.4 amps
30.5 feet through 37.5 feet:	510 VA / 4.03 amps
38 feet through 45 feet:	612 VA / 5.1 amps
45.5 feet through 52.5 feet:	714 VA / 6 amps
53 feet through 60 feet:	816 VA / 6.8 amps
60.5 feet through 67.5 feet:	918 VA / 7.7 amps
68 feet through 75 feet:	1020 VA / 8.5 amps
75.5 feet through 82.5 feet:	1122 VA / 9.4 amps
83 feet through 90 feet:	1224 VA / 10.2 amps
90.5 feet through 97.5 feet:	1326 VA / 11.1 amps
98 feet through 105 feet:	1428 VA / 11.9 amps
105.5 feet through 112.5 feet:	1530 VA / 12.8 amps
113 feet through 120 feet:	1632 VA / 13.6 amps
120.5 feet through 127.5 feet:	1734 VA / 14.5 amps

Temperature range:

0 to 110 degrees F. Lamps will not achieve full brightness at temperatures below 25 degrees F. 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.

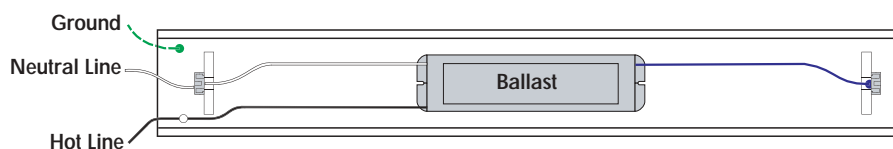
Electrical information:

This chart reflects electrical loading characteristics for fixture type ECLS (single lamp). Please consult factory for row lengths longer than 150 feet.

Electronic dimming controls:

Cathode Light Strip may be dimmed however, dimming the fixtures in cold weather may result in poor lamp performance. It is recommended that lamps be kept at full brightness in cold climates. Dimmers used in conjunction with this fixture must be rated for cold cathode or neon loads. Please consult dimmer manufacturer or Cathode Lighting Systems for inquiries regarding proper dimmer compatibility.

TYPICAL FIXTURE WIRING DIAGRAM - MODEL ECLS (Single Lamp Fixture)



Fixture wiring is extremely simple. Each fixture is supplied from the factory prewired. A qualified electrical contractor must wire the fixture to line voltage, the neutral line, and ground.



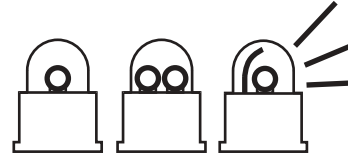


ENGINEERED & LISTED FOR THE MOST DEMANDING OUTDOOR ENVIRONMENTS

Fixture is UL and cUL listed for wet outdoor locations. They are completely sealed from the elements and are designed to function perfectly in direct exposure to sun, rain, snow, hail, and high winds.

SINGLE, DOUBLE or REFLECTOR

Three model types are available: Single lamp, double lamp (each lamp in this fixture is independently controllable), and a single lamp with an assymetric specular reflector.

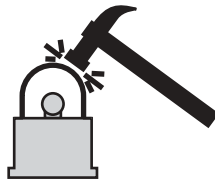


ULTRA LONG LAMP LIFE

Lamp life is extremely long, and in many cases, in excess of 50,000 hours.

SEAMLESS ILLUMINATION

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



HEAVY-DUTY CONSTRUCTION

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

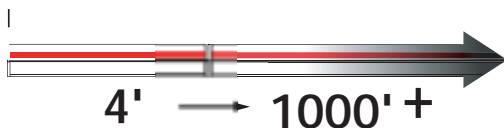


WIDE SELECTION OF HIGH LUMEN LAMP COLORS

Lamps may be ordered in six different shades and white and a wide variety of brilliant pastel and neon colors, at brightness levels that neon, fiber optic and LED light sources cannot match.

LOW PROFILE

Fixture profile is compact, only 4.5 inches wide and 5.5" tall.

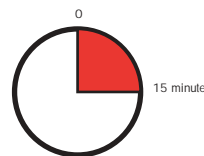


STANDARDIZED FIXTURES CAN BE COMBINED TO ILLUMINATE VIRTUALLY ANY ROW LENGTH

Individual fixtures come in lengths from 4 feet to 7.5 feet in increments of six inches. They may be combined to form any row length from 4 feet to thousands of feet, all in increments of six inches. Standardized fixture lengths translate into off-the-shelf convenience when ordering, and when procuring replacement materials, when necessary.

SIMPLE INSTALLATION & LOW MAINTENANCE

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

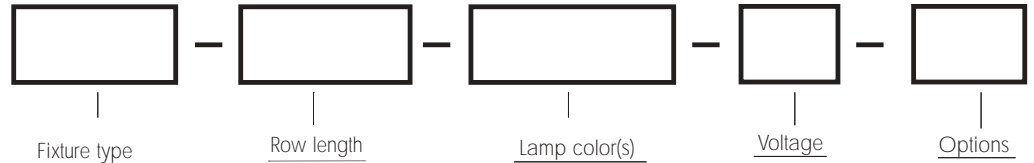


LAMP COLORS AND LIGHT OUTPUT (All white lamps are triphosphors with a CRI of 90+)

Cat. No.	Lamp color	Lumens per foot	Cat. No.	Lamp color	Lumens per foot
28TC	Incandescent white - 2800°K	371	SB	Sky Blue	306
30TC	Warm white - 3000°K	386	DB	Deep blue	252
35TC	Soft white - 3500°K	374	TQ	Turquoise	355
42TC	Cool white - 4200°K	358	AQ	Aquamarine	288
50TC	Ice white - 5000°K	364	GR	Standard Green	360
65TC	Daylight - 6500°K	369	BG	Bright Green	390
PW	Pink white	216	GD	Gold	182
HP	Hot Pink	198	CY	Canary yellow	196
RD	Red	72	OR	Orange	144
LV	Lavender	234			
PR	Purple	180			

Photometric information: All photometric values are courtesy of ITL (Independent Testing Laboratories, Boulder, CO), LTL (Luminaire Testing Laboratories, Allentown, PA) and Cathode Lighting Systems Inc.

ORDERING INFORMATION



① When order a double lamp fixture (Model ECLSD), if each of the two lamps is to be a different color, list colors (separated with a slash). If both lamps are to be the same color, only one color need be listed. See examples below:

ECLSD - 66 - 28TC / SB - 120
 - Double lamp exterior cathode light strip
 - Row length of 66 feet
 - One lamp 2800 Incandescent white and one lamp Sky Blue
 - 120 volts / 60 Hz

ECLSD - 45.5 - AQ - 120
 - Double lamp exterior cathode light strip
 - Row length of 45' 6"
 - Lamp color (for both lamps): Aquamarine
 - 120 volts / 60 Hz

ECLS - Single lamp fixture
ECLSD - Double lamp fixture

List fixture or row length* in increments of .5 feet. Smallest fixture is 4 feet. (Example: A row length of 75' 6" would be expressed as 75.5).
 *Actual row length as supplied will be fractionally longer, (see page 3). Factory will confirm field dimensions required prior to fabrication.

See color chart above for correct catalog numbers.

See note ①

If color has not been chosen at time of specification, please write: TBD

120 - 120 volts
 60 Hz

R - Reflector (available with single lamp fixture (Model ECLS) only).

Example: ECLS - 77.5 - 28TC - 120 - R

