

BOLLARDS

LED & STANDARD



Virgo bollard shown with custom natural satin aluminum finish with clear top coat.

EVERGREEN

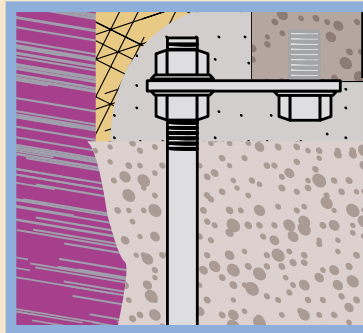
LIGHTING CORPORATION

Bollards
front cover

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EVERGREEN MANUFACTURERS OF QUALITY LIGHTING EQUIPMENT

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Custom Bollards

Since its establishment in 1993, Evergreen Lighting has made thousands of custom bollards and other luminaires. We are ready to meet the exacting aesthetic and technical standards that your job requires.

A custom design may involve manufacturing from an architect's design concept; it may incorporate themes, shapes or materials that exist in other areas of the design environment; it may utilize custom colors or finishes. Talk to us – we'll help you get that custom job, and we'll save you money.

Top row/ Left: custom materials & color.

Right: custom lens and guard.

Bottom row/ Left: custom base and dome.

Center: available custom louvers.

Right: custom source and optica.



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Custom Bollards



Top row/
Left: custom glow-top.
Center: custom height shaft.
Right: custom height shaft.

Bottom row/
Left: custom shaft, lens assembly, and dome.
Center: custom optics.
Right: custom base, shaft, lens assembly and dome.

Concrete Bollard Installation Guide

Installation in Soil

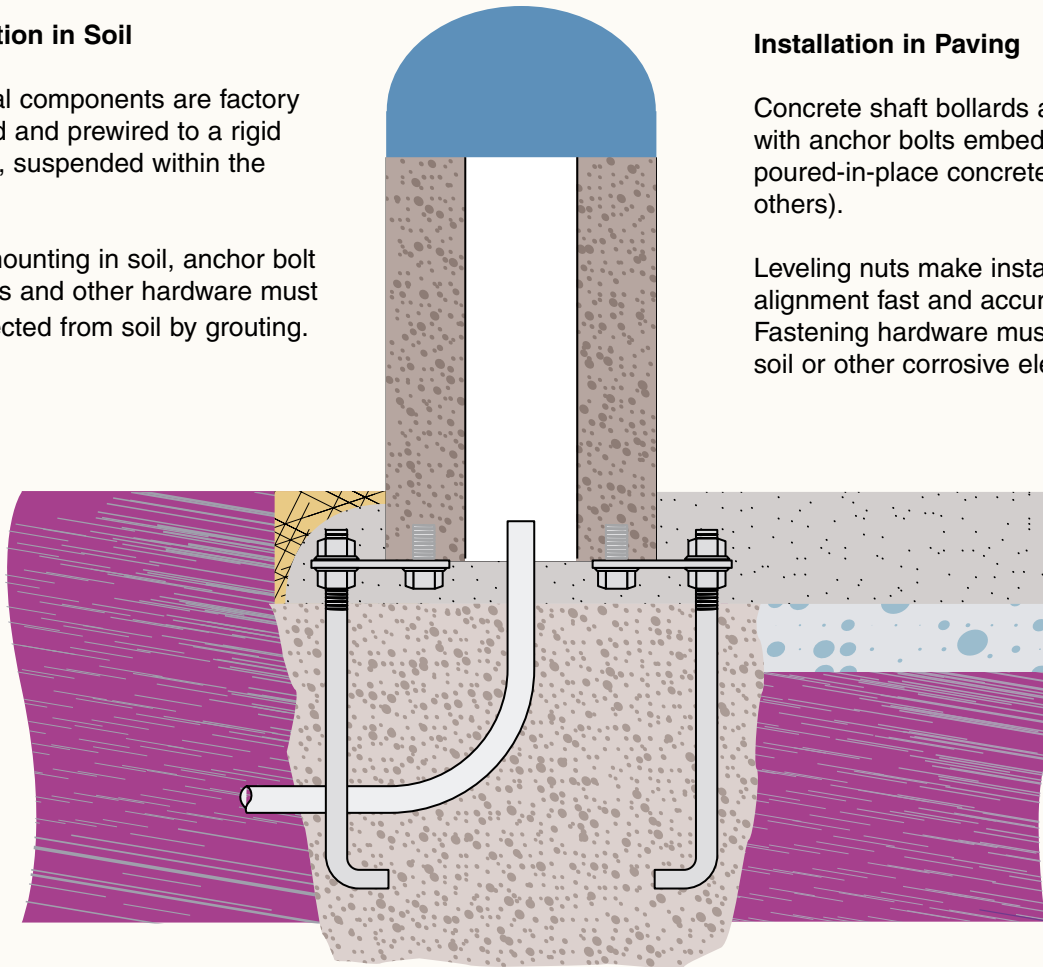
Electrical components are factory mounted and prewired to a rigid harness, suspended within the shaft.

When mounting in soil, anchor bolt fasteners and other hardware must be protected from soil by grouting.

Installation in Paving

Concrete shaft bollards are installed with anchor bolts embedded in a poured-in-place concrete footing (by others).

Leveling nuts make installation and alignment fast and accurate. Fastening hardware must not contact soil or other corrosive elements.



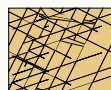
MATERIALS KEY



soil



paving



grout



concrete



gravel



bollard shaft

B I E B E R L I G H T I N G C O R P O R A T I O N
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The Aquarius Series

EVERGREEN LIGHTING CORPORATION



**ETL & CSA LISTED FOR WET LOCATIONS.
FACTORY TESTED BEFORE SHIPMENT.**

CONCRETE HOUSING – Pre-cast steel-reinforced hollow-core 8" round or square concrete, 42" tall. We offer four textures of sandblast-finished concrete: smooth, light, medium, and heavy; see the Shaft Texture table. The standard finish is natural concrete. The other available concrete colors (buff, brown, black, or custom to your specifications) are mixed into the concrete, not merely applied to the surface. See the Concrete Color table.

TOP CAP – Five top cap styles are offered: flat aluminum; aluminum dome top (for round sizes); aluminum pyramidal top (for square sizes); radiused aluminum top (for square sizes, shown on page 18 top right); and GloTop (for round sizes only; please consult factory).

LENS – The standard lens is 3/8" thick, clear, UV-stabilized high-impact resistant acrylic. It is rabbeted for flush fit, and silicone sealant creates a tight gasketing. An internal "house side" cut-off shield is available; see the Options table. Other lenses are available; consult factory.

SOCKET – HID sockets are glazed porcelain, medium base, 600V. Fluor-

escent sockets are standard PL-type.

ELECTRICAL COMPONENTS – Available in LED, MH and fluorescent. All Drivers/Ballasts are CWA/HPF regulating auto-transformers. Starting temperature for LED is -40°F, and MH starts at -20°F. Maximum wattage is 36W LED, 175W MH, or 42W PL fluorescent. Fluorescent is available in 120V or 277V only.

MOUNT – Anchor base. Hot dip galvanized 3/8" x 12" anchor bolts are supplied, complete with two each nuts and washers; there are four (4) anchor bolts.

OPTICS – Four different optical systems are offered:

- Paracline reflector. Made of specular spun aluminum.
- Specular aluminum stacked cone reflector.

- Borosilicate glass refractor system.
- Cast aluminum 45° cut-off louvers, finished the same color as the top cap.

FINISH – Finish on non-concrete parts is thermoset polyester oven-baked powder coat, in any standard Evergreen color. Custom colors are available to your specifications; consult factory.

The Aquarius Series features a round or square concrete shaft with aluminum top.

Left: Aquarius Bollard with GloTop cap and stacked cone optical system.

Right: Flat top and louvers.



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The Aquarius Series

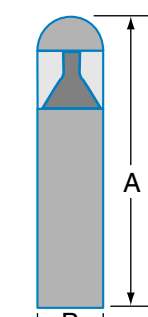
	1	2	3	4	5	6	7	8	9	10
FIXTURE	SIZE	SOURCE	VOLTS	LAMP	OPTICS	TOP CAP	SHAFT TEXTURE	SHAFT COLOR	TOP COLOR	OPTIONS
AQR	20	E2	2	L	C	4	H	NL	GY	MT, QR

Create a catalog number from the tables below. Example number: AQR – 20 – E2 – 2 – L – C – 4 – H – NL – GY – MT, QR

1 SIZE

	A	B
Size = 10	42"	8" round concrete
Size = 20	42"	8" square concrete
Size = 30	42"	Custom; please specify

MAXIMUM WATTAGE for 8" diameter is
36W LED
175 MH



2 LIGHT SOURCE

	LED	MH
24W	L24	
36W	L36	
70W		E2
100W		H2
150W		J2
175W	•	K2

consult factory

FLUORESCENT
X = single PL
Y = dual PL
(specify wattage up to single 42W or dual 13W)

3 VOLTAGE

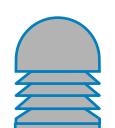
120V = 2	} Also available in Multi-Tap: see Options table
208V = 0	
240V = 4	
277V = 7	
480V = 8	Not available in Multi-Tap

NOTE: FLUORESCENT SOURCES AVAILABLE IN 120V OR 277V ONLY.


4 LAMP

L = with lamp
N = no lamp

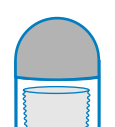
5 OPTICS



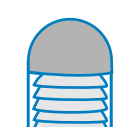
A
45° cut-off louvers



B
paracline reflector



C
glass refractor



D
stacked cone reflector

6 TOP CAP

1 = flat aluminum top	4 = radiused aluminum top†
2 = dome shaped aluminum top†	5 = GloTop (consult factory)
3 = pyramid shaped aluminum top‡	

†for round sizes only ‡for square sizes only

7 SHAFT TEXTURE

S = smooth textured concrete	M = medium textured concrete
L = light textured concrete	H = heavily textured concrete

8 SHAFT COLOR

NL = Natural	BK = Black
BF = Buff	CC = Custom Color (consult factory)
BN = Brown	

9 TOP COLOR

NOTE: TOP COLOR ALSO APPLIES TO LOUVERS

DB = Dark Bronze	BU = Blue
VP = Verde Patina	GR = Green
WH = White	BK = Black
SL = Silver	CC = Custom Color
GY = Gray	

10 OPTIONS

MT = multi-tap transformer	QR = quartz restrike
LS = 180° "house side" cut-off light shield	FV = international ballast; specify cycles

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The Aurora Series

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Left: Aurora Bollard, Size 20. Right: Size 30.

**ETL & CSA LISTED FOR WET LOCATIONS.
FACTORY TESTED BEFORE SHIPMENT.**

SIZES – Size 10 is the same style as the photo above left, except that it does not require the pedestal box. It is for LED, and fluorescent sources. Size 20, shown above left, is for LED, HID sources, and has the pedestal box. Size 30, shown above right, is for LED, fluorescent and HID sources, and always has the pedestal box. Please see the Size table.

HOUSING – Heavy duty cast aluminum.

OPTICS – Specular aluminum pathway lighting.

LENS – The standard lens is 1/8" thick clear tempered glass.

SOCKET – All sockets except fluorescent are glazed porcelain, medium base, rated to 600V.

ELECTRICAL COMPONENTS – Available in MH, LED

All HID ballasts are CWA/HPF regulating auto-transformers. Starting temperature is -40°F for LED and MH starts at -20°F. Maximum wattage is 100W for MH. Options: Maximum wattage for PL fluorescent is 42W. Maximum wattage for incandescent is 100W. Fluorescent is available in 120V or 277V only.

ANCHOR BASE AND BOLTS – Four (4) 3/8" by 12" galvanized anchor bolts are supplied, complete with two each nuts and washers. The anchor base plate is made of heavy-duty aluminum.

FINISH – The finish is thermoset polyester oven-baked powder coat, in any standard Evergreen color. Custom colors are available to your specifications; consult factory.

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The Aurora Series

	1	2	3	4	5	6	7
FIXTURE	SIZE	SOURCE	VOLTS	LAMP	LENS	COLOR	OPTIONS
AUR	30	L10	2	L	1	GR	MT, QR

Create a catalog number from the tables below. Example number: AUR – 30 – L10 – 2– L – 1 – GR – MT, QR

1 SIZE

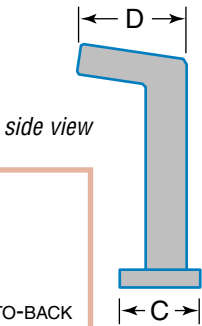
	A	B	C	D	E
Size = 10	40"	9-1/2"	7"	12"	9"
Size = 20	40"	9-1/2"	7"	12"	9"
Size = 30	40"	9-1/2"	7"	12"	9"

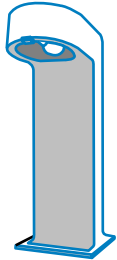
ALL SIZES MAX WATTS:

36W LED
100W MH
42W CFL

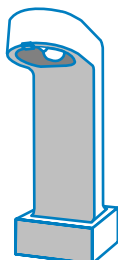
NOTE ON DIMENSIONS:

A IS THE OVERALL HEIGHT
B IS THE BASE SIDE-TO-SIDE
C IS THE BASE FRONT-TO-BACK
D IS THE SHAFT AND HEAD FRONT-TO-BACK
E IS THE SHAFT AND HEAD SIDE-TO-SIDE

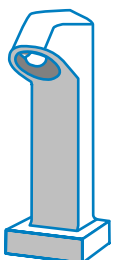




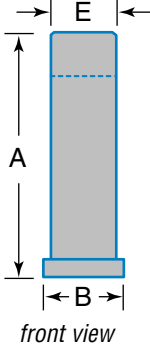
Size 10
fluorescent and
incandescent.



Size 20
HPS and MH



Size 30
fluorescent,
incandescent,
HPS and MH



front view

2 LIGHT SOURCE

	LED	MH
10W	L10	
20W	L20	
36W	L36	
70W		E2
100W		H2

FLUORESCENT

X = single PL
Y = dual PL
(specify wattage up to
42W single PL or 13W dual PL)

Z = incandescent
(Please specify type and wattage
up to 100W, medium base only.)

3 VOLTAGE

120V = 2 *Also available in
Multi-Tap;
see Options table*

208V = 0

240V = 4

277V = 7

4 LAMP

L = with lamp
N = no lamp

NOTE: EVERGREEN DOES NOT FURNISH
INCANDESCENT LAMPS

5 LENS

1 = clear tempered glass.
2 = custom; *please consult factory*

480V = 8 *Not available
in Multi-Tap*

NOTE: FLUORESCENT SOURCES
AVAILABLE IN 120V OR 277V ONLY.

6 COLOR

BK = Black	BU = Blue
GR = Green	SL = Silver
WH = White	GY = Gray
DB = Dark Bronze	CC = Custom Color
VP = Verde Patina	

7 OPTIONS

MT = multi-tap transformer
QR = quartz restrike
FV = international ballast;
specify cycles

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The Cathedral Series

EVERGREEN LIGHTING CORPORATION



Left: Cathedral 100 (Size 10). Right: Cathedral 200 (Size 20).

ETL & CSA LISTED FOR WET LOCATIONS.

EVERY BOLLARD IS FACTORY TESTED BEFORE SHIPMENT.

HOUSING – The housing is extra heavy duty cast aluminum. The standard height varies; please see the Size table. Vandal-resistant, tamper-proof screws are available; see the Options table.

LENS – The standard lens is obscure tempered glass.

OPTICS – The Cathedral is offered with an optional internal borosilicate glass refractor, recommended if the available clear tempered glass lenses are specified.

SOCKET – HID sockets are glazed porcelain, medium base, rated to 600V. Fluorescent sockets are standard PL-type.

ELECTRICAL COMPONENTS – Available in LED, MH and fluorescent. All ballasts are CWA/HPF regulating auto-transformers.

Starting temperature for LED is -40°F, and MH starts at -20°F. Maximum HID wattage is 175W. Maximum wattage for PL fluorescent is 42W. Fluorescent is available in 120V or 277V only.

MOUNTING – The standard mounting style is anchor bolt. Four (4) 3/8" x 12" galvanized anchor bolts are supplied, complete with two each nuts and washers. The anchor base plate is made of heavy-duty aluminum.

FINISH – The finish is thermoset polyester oven-baked powder coat, in any standard Evergreen Lighting color. Custom colors are available to your specifications; consult factory.

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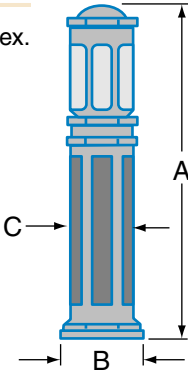
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The Cathedral Series

	1	2	3	4	5	6	7
FIXTURE	SIZE	SOURCE	VOLTS	LAMP	LENS	COLOR	OPTIONS
CTH	10	L24	7	L	1	BU	MT, QR

Create a catalog number from the tables below. Example number: CTH – 10 – L24 – 7 – L – 1 – BU – MT, QR

<h3>1 SIZE</h3> <table border="1"> <thead> <tr> <th></th> <th>A</th> <th>B (base)</th> <th>C (shaft)</th> </tr> </thead> <tbody> <tr> <td>Size = 10 Cathedral 100</td> <td>36"</td> <td>12"x12" sq.</td> <td>10" hex.</td> </tr> <tr> <td>Size = 20 Cathedral 200</td> <td>42"</td> <td>8-1/2"x9-1/2" rect.</td> <td>7-1/4" hex.</td> </tr> </tbody> </table> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>ALL SIZES MAX WATTS:</p> <p>36W LED 150W MH 42W CFL</p> </div> 		A	B (base)	C (shaft)	Size = 10 Cathedral 100	36"	12"x12" sq.	10" hex.	Size = 20 Cathedral 200	42"	8-1/2"x9-1/2" rect.	7-1/4" hex.	<h3>2 LIGHT SOURCE</h3> <table border="1"> <thead> <tr> <th></th> <th>LED</th> <th>MH</th> </tr> </thead> <tbody> <tr> <td>12W</td> <td>L12</td> <td></td> </tr> <tr> <td>24W</td> <td>L24</td> <td></td> </tr> <tr> <td>36W</td> <td>L36</td> <td></td> </tr> <tr> <td>70W</td> <td></td> <td>E2</td> </tr> <tr> <td>100W</td> <td></td> <td>H2</td> </tr> <tr> <td>150W</td> <td></td> <td>J2</td> </tr> <tr> <td>175W</td> <td></td> <td>K2</td> </tr> </tbody> </table> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>FLUORESCENT</p> <p>X = single PL Y = dual PL</p> <p>(specify wattage up to 42W single PL or 13W dual PL)</p> </div>		LED	MH	12W	L12		24W	L24		36W	L36		70W		E2	100W		H2	150W		J2	175W		K2
	A	B (base)	C (shaft)																																		
Size = 10 Cathedral 100	36"	12"x12" sq.	10" hex.																																		
Size = 20 Cathedral 200	42"	8-1/2"x9-1/2" rect.	7-1/4" hex.																																		
	LED	MH																																			
12W	L12																																				
24W	L24																																				
36W	L36																																				
70W		E2																																			
100W		H2																																			
150W		J2																																			
175W		K2																																			
<h3>3 VOLTAGE</h3> <p>120V = 2</p> <p>208V = 0</p> <p>240V = 4</p> <p>277V = 7</p> <p><i>Also available in Multi-Tap: see Options table</i></p>	<h3>4 LAMP</h3> <p>L = with lamp</p> <p>N = no lamp</p>	<h3>5 LENS</h3> <p>1 = obscure tempered glass (standard)</p> <p>2 = clear tempered glass <i>(glass refractor recommended: see Options table)</i></p> <p>3 = custom; please consult factory</p>																																			
<p>480V = 8</p> <p><i>Not available in Multi-Tap</i></p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>NOTE: FLUORESCENT SOURCES AVAILABLE IN 120V OR 277V ONLY.</p> </div>	<h3>6 COLOR</h3> <p>BK = Black</p> <p>GR = Green</p> <p>WH = White</p> <p>DB = Dark Bronze</p> <p>BU = Blue</p> <p>SL = Silver</p> <p>VP = Verde Patina</p> <p>GY = Gray</p> <p>CC = Custom Color</p>	<h3>7 OPTIONS</h3> <p>RF = glass refractor with 360° distribution</p> <p>MT = multi-tap transformer</p> <p>TP = tamper-proof screws</p> <p>QR = quartz restrike</p> <p>FV = international ballast; specify cycles</p>																																			

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The Nautilux Series

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*Left: Size 10, shown with one ring, is 6" in diameter.
Right: Size 20, shown with two rings, is 8" in diameter.
Both sizes are available with no rings.*

**ETL & CSA LISTED FOR WET LOCATIONS.
FACTORY TESTED BEFORE SHIPMENT.**

HOUSING – Heavy-gauge cast, spun, and extruded aluminum. The Nautilux shaft is 6" or 8" in diameter and 42" tall overall.

ELECTRICAL COMPONENTS – Available in LED, MH and fluorescent. All ballasts are CWA/HPF regulating auto-transformers. Starting temperature for LED is -40°F, and MH starts at -20°F. Maximum wattage is 175W for HID sources and 42W for PL fluorescent. Fluorescent is available in 120V or 277V only.

ANCHOR BASE & BOLTS – Three (3) 3/8" x 12" galvanized anchor bolts are supplied, complete with two each nuts and washers. The anchor

base plate is made of heavy-duty aluminum.

OPTICS – Distribution is 360°, using a special nautically-styled borosilicate glass refractor. An optional 180° internal cut-off shield is available, as well as a GloTop dome; please see the Options table.

SOCKET – HID sockets are medium base glazed porcelain, rated to 600V. Fluorescent sockets are standard PL-type.

FINISH – The finish is thermoset polyester oven-baked powder coat, in any standard Evergreen Lighting color. Custom colors are available to your specifications; consult factory.

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Bollards
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The Nautilux Series

	1	2	3	4	5	6	7	8
FIXTURE	SIZE	SOURCE	VOLTS	LAMP	OPTICS	RINGS	COLOR	OPTIONS
NLX	10	H2	0	L	5	2	SL	MT, PC

Create a catalog number from the tables below. Example number: NLX – 10 – H2 – 0 – L – 5 – 2 – SL – MT, PC

1 SIZE

Size = **10**
6" dia.

Size = **20**
8" dia.

ALL SIZES MAXIMUM WATTAGES:
36W LED 100W MH 42W FLUOR.

2 LIGHT SOURCE

	LED	MH
12W	L12	
24W	L24	
36W	L36	
70W		E2
100W		H2
150W		J2
175W		K2

Pulse start available:
consult factory

FLUORESCENT
X = single PL
Y = dual PL
*(specify wattage up to
42W single PL
or 13W dual PL)*

3 VOLTAGE

120V = **2** } *Also available
in Multi-Tap:
see
Options table*

208V = **0**

240V = **4**

277V = **7**

480V = **8** } *Not available
in Multi-Tap*

NOTE: FLUORESCENT
SOURCES AVAILABLE IN 120V
OR 277V ONLY.

4 LAMP

L = with lamp
N = no lamp

5 OPTICS

5 = 360° distribution pattern

7 COLOR

BK = Black
GR = Green
WH = White
DB = Dark Bronze
SL = Silver
GY = Gray
BU = Blue
VP = Verde Patina
CC = Custom Color

8 OPTIONS

MT = multi-tap transformer

PC = photo cell

GT = GloTop (opal polycarbonate dome)

CS = 180° internal cut-off shield

FV = international ballast; specify cycles

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The Orion Series of Concrete Bollards

EVERGREEN LIGHTING CORPORATION

ETL & CSA LISTED FOR WET LOCATIONS. FACTORY TESTED BEFORE SHIPMENT.

SHAPES – The Orion 10 is round with a flat top; the Orion 20 is round with a dome top; the Orion 30 is square with a flat top; the Orion 40 is square with a pyramidal top; and the Orion 50 is round with a radius top.

HOUSING – Steel-reinforced pre-cast hollow-core concrete. We offer four textures of sandblast-finished concrete: smooth, light, medium, and heavy. As an option, we offer tiles installed onto the housing shaft (the "handicapped parking" symbol, for example, or your logo, or decorative and other tiles to your specifications); see the Options table.

LOUVERS – Rugged cast aluminum grilles, 360° around the bollard. The styles offered are horizontal, vertical, and 45° cut-off. While any Orion may be specified with vertical louvers or horizontal louvers, the 45° cut-off louvers may be specified on 8" sizes only; please see the Louvers table.

LENS – Clear or opal white polycarbonate.

OPTICS – A 360° distribution pattern is standard. An optional internal "house side" 180° cut-off shield is available; please see the Options table.

ELECTRICAL COMPONENTS – Available in LED, MH, and fluorescent. All ballasts are CWA/HPF regulating auto-transformers.

Starting temperature for LED is -40°F, and MH starts at -20°F. Maximum wattage is 36W LED, 175W MH and 42W PL fluorescent. Fluorescent is available in 120V or 277V only.

SOCKET – HID sockets are glazed porcelain, medium base, rated to 600V. Fluorescent sockets are the standard PL-type.

MOUNTING – Anchor base mounted. Four (4) 3/8" x 12" galvanized anchor bolts are supplied, complete with two each nuts and washers. The anchor base plate is made of heavy-duty steel.

CONCRETE FINISH – The standard finish is natural concrete. The other available colors (buff, brown, black, or custom to your specifications) are mixed into the concrete rather than merely applied to the surface.

LOUVER FINISH – Finish is thermoset oven-baked powder coat, in any standard Evergreen Ltg Color. Custom colors are available to your specifications.



Orion 10
round w/ flat top



Orion 20
round w/ dome top



Orion 30
square w/
flat top



Orion 40
square w/
pyramidal top



Orion 50
round w/
radius top

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Bollards
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The Orion Series *of Concrete Bollards*

	1	2	3	4	5	6	7	8	9	10
FIXTURE	SIZE	SOURCE	VOLTS	LAMP	LOUVERS	LOUVER COLOR	LENS	TEXTURE	CONCRETE COLOR	OPTIONS
OR	20/42/12	L24	7	L	3	BK	2	4	NL	MT, LS

Create a catalog number from the tables below. Example number: OR – 20/42/12 – L24 – 7 – L – 3 – BK – 2 – 4 – NL – MT, LS

1 SIZE

	Shape & Top	A	B
Size = 10	round, flat top	42"	8", 10", 12", 14", 16", or 18" dia.
Size = 20	round, dome top	42"	8", 10", 12", 14", 16", or 18" dia.
Size = 30	square, flat top	42"	8", 10", 12", 14", 16", or 18" sq.
Size = 40	square, pyramid top	42"	8", 10", 12", 14", 16", or 18" sq.
Size = 50	round, radius top	42"	8" diameter only

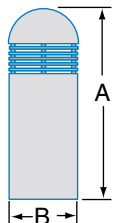
**ALL SIZES
MAX WATTS:**

36W LED
175W MH
42W PL

TO SPECIFY SIZE, PLEASE INCLUDE:

- the size number
- dimension "A"
- (42" is standard, or consult factory for custom)
- dimension "B".

Example:
10/42/12 = Size 10, 42" high, 12" diameter



2 LIGHT SOURCE

	LED	MH
12W	L12	
24W	L24	
36W	L36	
100W		H2
150W		J2
175W		K2

FLUORESCENT

X = single PL **Y** = dual PL
(specify wattage up to single 42W or dual 13W)

3 VOLTAGE

120V = 2	} Also available in Multi-Tap: see Options table
208V = 0	
240V = 4	
277V = 7	
480V = 8	Not available in Multi-Tap

NOTE: FLUORESCENT SOURCES AVAILABLE IN 120V OR 277V ONLY.

4 LAMP

L = with lamp
N = no lamp

5 LOUVERS

1 = 45° cut-off louvers
(on 8" round and square sizes only)

2 = horizontal louvers

3 = vertical louvers

6 LOUVER COLOR

BK = Black	SL = Silver
GR = Green	GY = Gray
WH = White	BU = Blue
DB = Dark Bronze	CC = Custom Color (consult factory)
VP = Verde Patina	

7 LENS

1 = clear
2 = opal

8 TEXTURE

1 = smooth
2 = light
3 = medium
4 = heavy

9 CONCRETE COLOR

NL = Natural
BF = Buff
BN = Brown
BK = Black
CC = Custom Color
(consult factory)

10 OPTIONS

MT = multi-tap transformer
LS = "house side" cut-off light shield
TL = tile (please consult factory)
FV = international ballast; specify cycles

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The Venus Series

EVERGREEN LIGHTING CORPORATION



The Venus Series features round or square aluminum bollards with cast aluminum louvers.

HOUSING – Round or square extruded aluminum, offered in 8", 10", and 12" standard sizes. The standard height is 42".

LOUVERS – Rugged cast aluminum external louvers 360° around the bollard. Available 180° louvers are illustrated in the Options table.

LENS – The standard lens is 3/8" thick, clear, UV-stabilized high-impact resistant acrylic. It is rabbeted for flush fit, and silicone sealant creates a tight gasketing.

OPTICS – Available "house side" cut-off shield; please see the Options table.

SOCKET – HID sockets are glazed porcelain, medium base, rated to 600V. Fluorescent sockets are standard PL-type.

ELECTRICAL COMPONENTS – Available in LED, MH and fluorescent. All ballasts are CWA/HPF regulating auto-transformers. The starting temperature for LED is -40°F, and MH starts at -20°F. Maximum wattage is 36W LED, 175W MH, and

**ETL & CSA LISTED FOR WET LOCATIONS.
FACTORY TESTED BEFORE SHIPMENT.**

42W PL fluorescent. Fluorescent is available in 120V or 277V only.

TOP CAP – The top cap is spun, cast, die-formed or extruded from heavy-gauge aluminum. Four shapes are available:

- flat top, for round or square Venus bollards (see photos center and right, above).
- dome top, for round Venus bollards (see photo above left).
- pyramid top, for square Venus bollards.
- radiused top, for square Venus bollards (see photo on page 18, right).

ANCHOR BASE AND BOLTS – Three (3) 3/8" x 12" galvanized anchor bolts are supplied, complete with two each nuts and washers. The anchor base plate is made of heavy-duty aluminum.

FINISH – The finish is thermoset polyester oven-baked powder coat, in any standard Evergreen Lighting color. Custom colors are available to your specifications; consult factory.

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**Bollards
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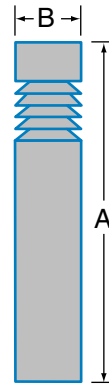
The Venus Series

	1	2	3	4	5	6	7
FIXTURE	SIZE	SOURCE	VOLTS	LAMP	TOP CAP	COLOR	OPTIONS
VEN	11	H2	4	L	4	WH	MT, TP

Create a catalog number from the tables below. Example number: VEN – 11 – H2 – 4 – L – 4 – WH – MT, TP

1 SIZE

	Shape	A	B	Max. Watts
Size = 10	Round	42"	8" diameter	100W
Size = 11	Square	42"	8" x 8"	100W
Size = 20	Round	42"	10" diameter	36W LED, 175W MH
Size = 21	Square	42"	10" x 10"	36W LED, 175W MH
Size = 30	Round	42"	12" diameter	36W LED, 175W MH
Size = 31	Square	42"	12" x 12"	36W LED, 175W MH
Size = 40	*	*		



* custom: please specify

ALL SIZES
MAXIMUM FLUORESCENT
WATTAGE IS 42W

2 LIGHT SOURCE

	LED	MH
12W	L12	
24W	L24	
36W	L36	
70W		E2
100W		H2
150W		J2
175W		K2

FLUORESCENT
X = single PL Y = dual PL
(specify wattage up to
single 42W or dual 13W)

4 LAMP

L = with lamp
N = no lamp

3 VOLTAGE

120V = 2
208V = 0
240V = 4
277V = 7

Also available in Multi-Tap:
see Options table

480V = 8 Not available in Multi-Tap

NOTE: FLUORESCENT SOURCES AVAILABLE IN
120V OR 277V ONLY.

5 TOP CAP

- 1 = Flat top cap (all sizes)
- 2 = Dome top cap (not available for sizes 11, 21, or 31)
- 3 = Pyramid top cap (not available for sizes 10, 20, or 30)
- 4 = Radiused top cap (not available for sizes 10, 20, or 30)

7 OPTIONS

- MT = multi-tap transformer
- QR = quartz restrike
- PC = photo cell
- PL = polycarbonate lens
- HL = 180° louvers (illustrated at right)
- LS = "house side" cut-off light shield
- LV = contrasting color louvers; specify color
- TP = tamper-proof hardware
- FV = international ballast; specify cycles



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The Virgo Series

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refractor/
dome top



stacked
cone/
dome top



paracline/
radius top

The Virgo Series features round or square aluminum bollards with a choice of 3 optical systems.

HOUSING – Round or square extruded aluminum .125" thick. Standard height is 42".

SHAPE – Round or square, 6" and 8" sizes.

TOP CAP – Spun, cast, die-formed or extruded from heavy-gauge aluminum. Available in four shapes:

- flat top, for round or square Virgo bollards.
- dome top, for round Virgo bollards (see photos above left and center).
- pyramid top, for square Virgo bollards.
- radiused top, for square Virgo bollards (see photo above right).

LENS – The standard lens is 3/8" thick, clear, UV-stabilized high impact resistant acrylic. It is rabbeted for flush fit, and silicone sealant creates a tight gasketing. Other lenses are available; please consult factory.

SOCKET – HID sockets are glazed porcelain, medium base, rated to 600V. Fluorescent sockets are standard PL-type.

ELECTRICAL COMPONENTS – Available in LED, MH and fluorescent. All

ballasts are CWA/HPF regulating auto-transformers. The starting temperature for LED is -40°F, and MH starts at -20°F. Maximum wattage is 36W LED, 175W MH and 42W PL fluorescent. Fluorescent is available in 120V or 277V only.

MOUNT – Anchor base and bolt. Three (3) 3/8" x 12" hot dip galvanized anchor bolts are supplied, complete with two each nuts and washers.

OPTICS – Three different optical systems are offered for the Virgo:

- Specular spun-aluminum paracline reflector.
- Specular aluminum stacked cone reflector.
- Borosilicate glass refractor.

Additionally, a "house side" cut-off shield is available; please see the Options table.

FINISH – The finish is thermoset polyester oven-baked powder coat, in any standard Evergreen Lighting color. Custom colors are available to your specifications; consult factory.

Above and front cover: Virgo shown with custom natural satin aluminum finish with clear top coat.

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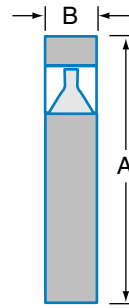
Bollards
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The Virgo Series

	1	2	3	4	5	6	7	8
FIXTURE	SIZE	SOURCE	VOLTS	LAMP	TOP CAP	OPTICS	COLOR	OPTIONS
VIR	10	L30	2	L	1	A	DB	MT, LS

Create a catalog number from the tables below. Example number: VIR – 10 – L30 – 2 – L – 1 – A – DB – MT, LS

1 SIZE				
	Shape	A	B	Max. Watts
Size = 10	Round	42"	6" dia.	30W LED, 100W HID, 42W fluor.
Size = 11	Square	42"	6" x 6"	30W LED, 100W HID, 42W fluor.
Size = 20	Round	42"	8" dia.	30W LED, 175W MH, 42W fluor.
Size = 21	Square	42"	8" x 8"	30W LED, 175W MH, 42W fluor.
Size = 30	*	*		<i>* custom: please specify</i>



2 LIGHT SOURCE		
	LED	MH
10W	L10	
20W	L20	
30W	L30	
70W		E2
100W		H2
150W		J2
175W		K2

FLUORESCENT
 X = single PL Y = dual PL
 (specify wattage up to single 42W or dual 13W)

3 VOLTAGE	
120V = 2	} Also available in Multi-Tap: see Options table
208V = 0	
240V = 4	
277V = 7	
480V = 8	Not available in Multi-Tap

NOTE: FLUORESCENT SOURCES AVAILABLE IN 120V OR 277V ONLY.

4 LAMP
L = with lamp
N = no lamp

5 TOP CAP
1 = Flat (all sizes)
2 = Dome (round sizes only)
3 = Pyramid (square sizes only)
4 = RADIUS (square sizes only)

6 OPTICS		
A = Paraline reflector		
B = Stacked cone reflector		
C = Glass refractor		

7 COLOR	
BK = Black	GY = Gray
GR = Green	BU = Blue
WH = White	VP = Verde Patina
DB = Dark Bronze	CC = Custom Color
SL = Silver	

8 OPTIONS	
QR = quartz restrike	TP = tamper-proof hardware
LS = 180° cut-off light shield	MT = multi-tap transformer
PC = photo cell	FV = international ballast; specify cycles
PL = polycarbonate lens	

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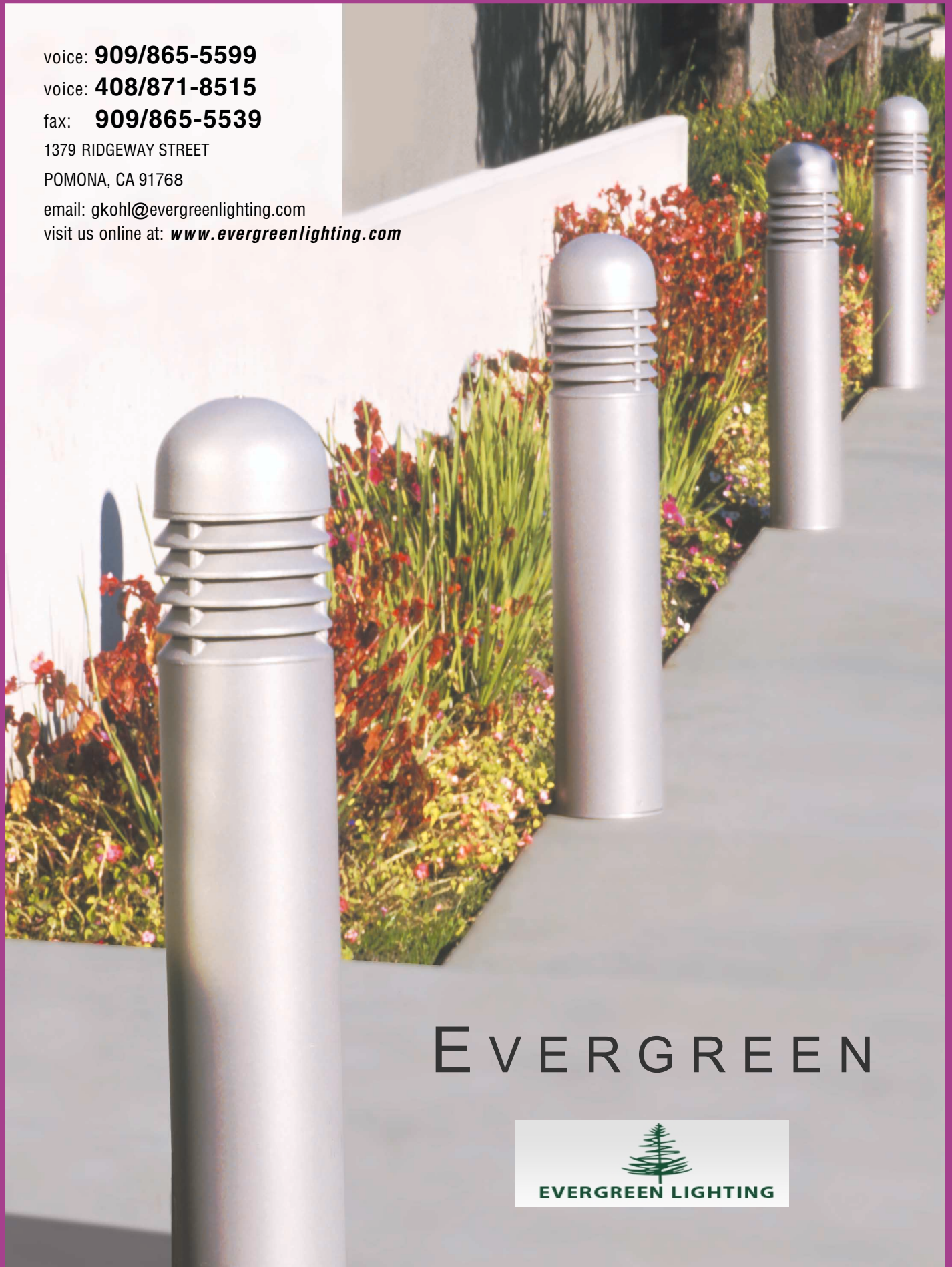
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