



MODEL

TYPE LED

SERIES BOLLARDS



# **ORDERING INFORMATION**

## Model ORION

Type LED

## Series Bollards







Round w/ Round w/ flat top dome top

Square w/ flat top

Round w/ radius top

Square w/ pyramid top

FIXTURE	SIZE	ТОР	SOURCE	VOLTS	LAMP / TEMP	CONCRETE COLOR	CONCRETE TEXTURE
ORI-R = Round	8 = 8" dia. x 42"H	FT = Flat Top	10W	U = 120v- 277v	3K = 3000K	NL = Natural	1 = Smooth
ORI-S =	10 = 10" dia. x 42"H	DT = Dome Top (round	20W	8 = 480v	4K = 4000K	BF = Buff	2 = Light
Square	12 = 12" dia. x 42"H	only)	30W		5K = 5000K	BN = Brown	3 = Medium
	16 = 16" dia. x 42"H	PT = Pyramid Top (square	40W			BK = Black	4 = Heavy
	18 = 18" dia. x 42"H	only)	50W			WT = White	
	CS = Custom size, consult factory	RT = Radius Top (round only)	60W			CC = Custom	
LENS	LOUVERS	LOUVER COLOR	OPTIONS		I		I
CA = Clear Acrylic FA = Frosted	L1 = 45° cut-off louvers* L2 = Horizontal louvers	DB = Dark Bronze BK = Black	SP = Surge protection CS = 180° Shield	A A A A A A A A A A A A A A A A A A A			
Acrylic OA = Opal Acrylic	L3 = Vertical louvers	WH = White SL = Silver	AG = Anti- graffiti coating				
	*only available on 8" dia.	CC = Custom Color	(consult factory)				



# **SPECIFICATIONS**

#### Housing

The Orion concrete bollard series is available either round or square, in a variety of diameters and widths. The housing is fabricated from steel-reinforced pre-cast hollow core concrete. We offer four textures of sandblast finished concrete: smooth, light medium, and heavy.

#### Louvers

Rugged cast aluminum grilles, 360° around the bollard. The styles offered are horizontal, vertical, and 45° cutoff (only available on 8" bollards). The louvers are available in any standard or custom color finish.

#### LED

EncapLED, an IP66-rated ETL and DLC listed LED module system, combines optics and heat sink into one configurable unit which give precise light distribution. Available in either 360° or 180° pattern. It allows us to do 10w. increment adjustment on light output. The module achieves 110-120 lm/w efficacy with LUXEON LUMILEDS TX CHIPS. Beside maximizing heat dissipation surface, we also utilize convection-based heat management which creates additional air flow around each chip. Unlike a big metal heat sink where the temperature for the chips in the middle is higher than the rest, the heat of each EncapLED chip gets dissipated evenly. A better heat dissipation design keeps the junction temperature low and ultimately prolongs the life of the LED chips. Our modules are available in any of our fixture designs, as well as in a simple retro-fit kit form for existing fixtures.

#### Lens

Lens is fabricated from acrylic. Specify clear, frosted, or opal lens.

### **Mounting Options**

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 heavyduty steel.

### Finish

The standard finish is natural concrete. The other available colors are mixed into the concrete rather than applied to the surface, creating a uniform coloration across the entire bollard.

#### **Certificates & Warranty**

- DLC
- ETL
- Suitable for Wet Locations
- 5-Year Warranty



## **INSTALLATION GUIDE**

