



650LED MILFORD SERIES

LED BOLLARDS

DIMENSIONS
15" Ø
30" to 96"
TALL

7 YEAR WARRANTY

LUMEN RANGE
520-590

LIFE SPAN
L70
MINIMUM
100,000
HOURS

UL LISTED

CLICK FOR FAQ'S

JOB NAME _____

FIXTURE TYPE _____

MEMO _____

BUILD A PART NUMBER

ORDERING EXAMPLE: **650LED-36"** -IL4OTS-MDL07-CL2/BKT

Model	Overall Height	LED	CCT	Type	Driver	Option Chain Loop	Option Fuse	Option Photocell	Option Receptacle	Finish

Model

- 650LED
- 650LED-QR

Overall Height (In Inches)

- ___" (Available from 30" to 96")

LED

- IL

CCT - Color Temperature (K)

- 27(00)
- 30(00)
- 35(00)
- 40(00)
- 50(00)

Type

- TS (Symmetric)

Driver

- MDL07 (120V-277V, 700mA)
- MDH07 (347V-480V, 700mA)

Options (Click here to view accessories sheet)

- CL1 Single Chain Loop
- CL2 Double Chain Loops at 180°
- FHD¹ Double Fuse and Holder
- PCD Electronic Button Photocontrol, mounted on an access door (120V-277V)
- PCD4 Electronic Button Photocontrol, mounted on an access door (480V)
- GFI LPIUC² 15 Amp duplex GFCI receptacles with a low-profile in-use cover
- GFI IUC² 15 Amp duplex GFCI receptacles with a standard in-use cover
- USB LPIUC² 15 Amp duplex USB/Receptacle combo with a low-profile in-use cover (NON-GFI)
- USB IUC² 15 Amp duplex USB/Receptacle combo with a standard in-use cover (NON-GFI)

¹ Ships loose for installation in base.
² Accessory requires 36" minimum height.

Finish

Standard Finishes³ (Click here to view paint finish sheet)

- BKT Black Textured
- WHT White Textured
- PGT Park Green Textured
- ABZT Architectural Medium Bronze Textured
- DBT Dark Bronze Textured

³ Smooth finishes are available upon request.

Sternberg Select Finishes

- VG Verde Green
- SI Swedish Iron
- OWGT Old World Gray Textured

Custom Finishes⁴

- CM Custom Match
- OI Old Iron
- RT Rust
- WBR Weathered Brown
- CD Cedar
- WBK Weathered Black
- TT Two Tone

⁴ Custom colors require upcharge.

Specifications

General

Traditional ornamental cast aluminum bollard with removable cap. The bollard includes 12 vertical slots and an internal white acrylic lens which creates uniform illumination with a high level of visual comfort. The bollard shall be UL listed in US and Canada.

Construction

The bollard is made of heavy wall 356 alloy cast aluminum with a 7/8" thick floor cast as an integral part of the bollard. The high tensile aluminum shaft shall be double circumferentially welded internally and externally to the bollard for added strength. The removable bollard cap is cast aluminum.

Quick-Release Mounting (Optional)

The bollard can include an optional quick release mount in lieu of anchor bolts, which allows for tool-less removal of the bollard for convenience or emergency access. The burial portion shall be installed in ground flush with grade, it shall be made of aluminum extrusion and shall have a wiring compartment, keyway and flexible aircraft cable connection system for securing the bollard to the ground. The removable bollard portion shall have a mated extension and anti-rotation key, along with a slot in the base for a lock to externally attach to the aircraft cable loop (LOCK BY OTHERS). The system comes with a quick release power connection for safety.

LED's

The luminaire shall use high output, high brightness LED's, consisting of a two piece assembly complete with Chip on Board (COB) LED component and COB holder frame. The LED's and printed circuit boards shall be 100% recyclable; they shall also be protected from moisture and corrosion by a conformal coating of 1 to 3 mils. They shall not contain lead, mercury or any other hazardous substances and shall be RoHS compliant. The LED life rating data shall be determined in accordance with IESNA LM-80. The High Performance white LED's will have a life expectancy of approximately 100,000 hours with not less than 70% of original brightness (lumen maintenance), rated at 25°C. The High Brightness, High Output LED's shall be 4000K (2700K, 3000K, 3500K or 5000K option) color temperature with a minimum of 70 CRI. Consult factory for custom color CCT. The luminaire shall have a minimum _____ (see table) delivered initial lumen rating when operated at steady state with an average ambient temperature of 25°C (77°F)

See next page

Optics

The luminaire shall be provided with an individual collimating type acrylic optic applied to the COB (Chip On Board) LED assembly. The luminaire shall provide a symmetric distribution with near perfect surface brightness and uniformity.

Electronic Driver

The LED driver shall be U.L. Recognized. It shall be securely mounted inside the bollard, for optimized performance and longevity. It shall be supplied with a quick-disconnect electrical connector on the power supply, providing easy power connections and fixture installation. It shall have overload, overheat and short circuit protection, and have a DC voltage output, constant current design, 50/60HZ. It shall be supplied with line-ground, line-neutral and neutral-ground electrical surge protection in accordance with IEEE/ANSI C62.41.2 guidelines. It shall be a high efficiency driver with a THD less than 20% and a high power factor greater than .9. It shall be dimming capable using a 0-10v signal, consult factory for more information.

Installation

Four 3/4" diameter, hot-dipped galvanized "L" type anchor bolts shall be provided with the bollard for anchorage, they shall be mounted in a 7" bolt circle. A door shall be provided for wiring and anchor bolt access. It shall be secured with tamper proof stainless steel hardware. Post will be provided with a grounding stud mounted on the base floor opposite the access door.

Photocell

The photocontrol shall be mounted on the bollard. The electronic button type photocontrol is instant on with a 5-10 second turn off, and shall turn on at 1.5 footcandles with a turn-off at 2-3 footcandles. Photocontrol is 120-277 volt and warranted for 6 years.

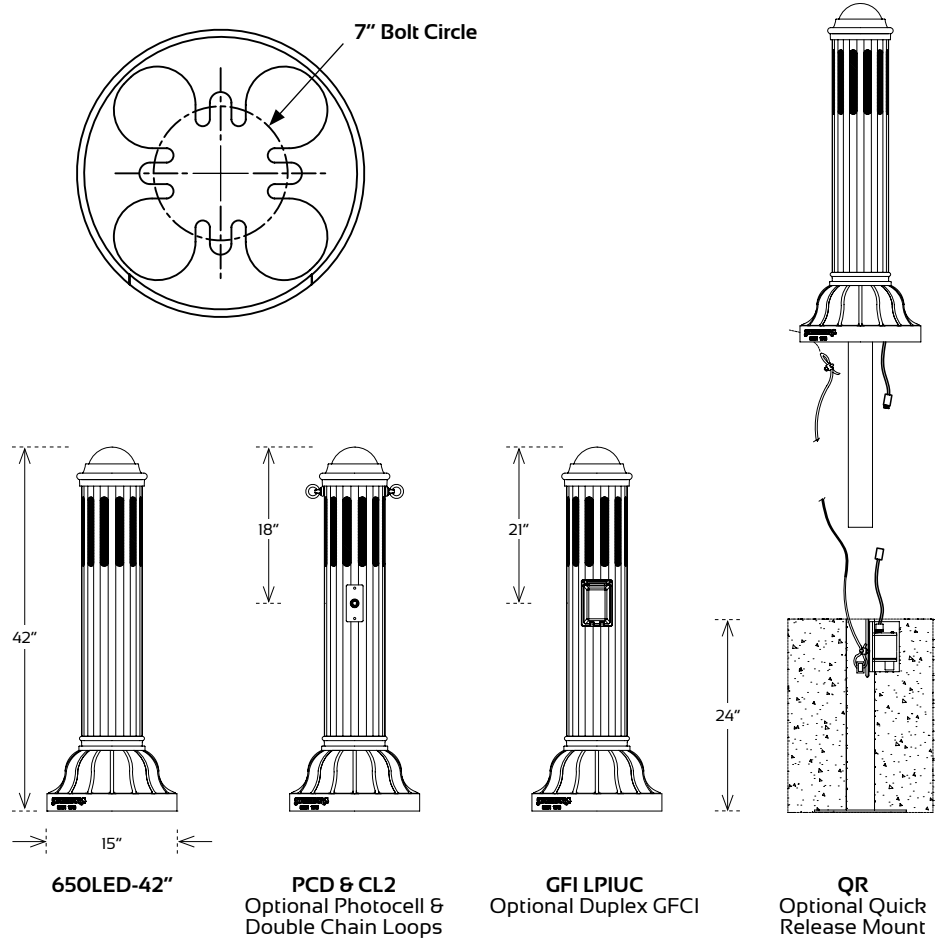
Warranty

Seven-year limited warranty. See product and finish warranty guide for details.

Finish

Refer to website for details.

Bollards



Performance

LIGHT SOURCE	TS DELIVERED LUMENS	EFFICACY (LPW)	WATTAGE
1L40TS-MDL07	590	19.7	30
1L30TS-MDL07	575	19.2	30
1L27TS-MDL07	520	17.3	30