MAKO-LED

# ARCHITECTURAL / LED LUMINAIRE



An indoor/outdoor architecturally styled high performance LED Luminaire available with 'normally-on' operation powered by line voltage, emergency operation powered by a Nickel-Cadmium battery source or a combination of both. Low profile, die-cast aluminum housing available in four powder-coated finishes: dark bronze, white, nickel and black.

## **PRODUCT SPECIFICS**

## CONSTRUCTION

Housing and mounting plate are constructed of 1/8" die-cast aluminum and sealed with a 1/8" closed-cell silicone gasket. The acrylic lens allows 94% light transmission. The reflector is electro-polished aluminum with 95% reflectance. Housing finish is powder coated electro-deposition paint available in four colors: dark bronze, white, nickel and black.

#### INSTALLATION

Universal backplate knockouts for mounting to standard 3 1/2", 4" octagonal and 4" square electrical boxes. An adhesive-backed neoprene gasket is provided to ensure a waterproof seal. A 1/2" – 1/4 NPT threaded conduit opening is provided at the top of the enclosure and sealed with a closure plug. The housing "snaps" to the back plate by a "blade and socket" arrangement.

## ILLUMINATION

The unit is illuminated by a high power light emitting diode (LED) assembly.

#### COMPLIANCES

UL1598 and UL8750 (AC MODE) UL 924 Listed (EM MODE) UL Wet Location Listed NFPA 101 Life Safety Code NFPA 70 National Electrical Code ROHS OSHA IES full cut-off compliant

#### WARRANTY

Three-year warranty for unit and electronics.

CATALOG NUMBER:

NOTES:

FIXTURE TYPE:

PROJECT:

## AVAILABLE OPERATION MODES

The MAKO-LED has three available modes of operation:

## **GENERAL LIGHTING (AC) MODE:**

In the AC mode, power is supplied from 120V or 277V AC source and is switched on/off with a photosensor or the unit may be switched on/off via wall switch allowing the unit to behave like a typical luminaire.

## **EMERGENCY LIGHTING (EM) MODE:**

Upon failure of normal utility power, the unit will automatically illuminate and provide a minimum of 90 minutes of emergency run-time powered by an internal nickel-cadmium battery.

Battery:

- 4.8V2.5Ah high temperature Nickel Cadmium battery provides more than 90 minutes discharge time to emergency source.
- 24 hours recharge after discharge.
- · Low voltage battery disconnection-prevents deep discharge damage to the battery.
- Standard with self diagnostics.

## **GENERAL LIGHTING & EMERGENCY MODE (ACEM)**

Under normal utility power, the unit will function In AC mode as detailed above. Upon the failure of Utility power, the unit will function in EM mode as Detailed above.

LUMINAIRE SPECIFICS			
Light Source	10W High Output LED		
LED Lamp Life	50,000 hrs. w/ 70% Lumen Maintenance		
Kelvin Temperature	5000K		
Color Rendering Index (CRI)	70		
Total Lamp Output	425 Lumens		
Total input Watts	12 Watts		
Input Voltage:	120/277VAC, 60 Hz.		
Operating Temperature	AC Mode: -22°F to 122°F		
	EM Mode: 32°F to 122°F		
	EM Mode w/ IH Option: -22°F to 122°F		
Power Factor	Average .80 (lagging)		

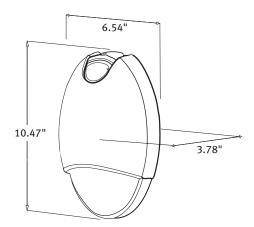


ORDERING INFORMATION				
MODEL	OPERATION MODE	HOUSING COLOR	OPTIONS	
MAKO-LED	AC = General Lighting	DB = Dark Bronze	IH = Internal Battery Heater	
	EM = Emergency Only	WH = White		
ACEM = General and Emergency	BK = Black			
		NK = Nickel		

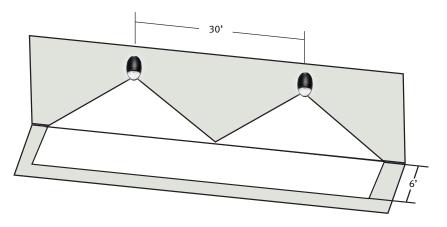
Ordering Example: MAKO-LED-ACEM-DB-IH

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## PATHWAY ILLUMINANCE



Meets Life Safety Code standard minimum illuminance of 0.1 fc and average illuminance of 1.0 fc. Illustration shown is a guideline for corridor center-to-center spacing with 9 ft mounting height and Minimum 80-50-20 reflectance values.

# SELF-DIAGNOSTICS (STANDARD ON EM & ACEM)

The circuit will continuously monitor the operating condition of the AC power, battery supply voltage, emergency lamp continuity, and charging circuit. If failure occurs, visual status will occur immediately via the dual-colored LED indicator that illuminates until fault has been corrected. The Self-Diagnostics also monitors the transfer circuit and performs automatic code compliant testing. The selftest will operate the equipment in emergency mode one minute every 28 days. A 30 minute full-function test is performed every six months, and a 90 minute full-function test is performed every 12 months. These tests can also be initiated manually by use of the test button.

CATALOG NUMBER:

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SPEC

FIXTURE TYPE:

PROJECT:

