

COOPER LIGHTING - SURE-LITES®

DESCRIPTION

The Sure-Lites ES Series Exits are designed for architectural excellence and minimal presence. The crystal clear wedge shaped panel allows architectural details to shine through while providing excellent light distribution and exit visibility. Long life, energy efficient LED lamps reduce energy costs and eliminate routine lamp maintenance.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Electronics

- Dual Voltage Input, 120/277 VAC 60Hz
- Long-life energy efficient LED lamps
- Solid-state Voltage Charger
- Solid-state Switching
- Brownout Circuit
- Test Switch/Power Indicator Light

Battery

- Sealed Nickel Cadmium
- Maintenance-Free, Long-Life
- Full Recharge Time, 24 hrs. (max.)

Housing Construction

- 18-gauge steel housing with conduit knockouts
- Recessed housing available for ceiling or wall mounting
- Adjustable hanger bars
- Connectors facilitate quick installation and maintenance
- Convenient 1/2" knockouts provided in top and end of surface mounted housing

Trim/Housing Plate

- Injection molded high-impact acrylic panel
- NFPA 101 compliant chevron directional indicators (when specified)
- Extruded trim plate in Brushed or Polished Aluminum, Polished

- Brass, White, Black and Bronze
- Red and Deep Green letter colors
- 6" Letters
- Clear, mirror, or white background
- Torsion springs secure trim plate to housing - no visible mounting hardware

Lamp Data

- LED, Red: Super-bright, long-life LEDs provide uniform illumination

Warranty

- Exit: 1-year
- Battery: 15-year pro-rata (self-powered only)



**ES
SERIES**

AC
SELF POWERED

SURFACE OR RECESSED

EDGELIT EXITS

LED LAMPS

EXIT LIGHTING

TOTALLY PREDICTABLE
RELIABILITY

ORDERING INFORMATION

Series ES6=AC Only, LED Lamps ES7=Self-Powered, LED Lamps ESH6=Housing For ES Recessed AC Only ESH7=Housing For ES Recessed Self-Powered EST6: Trim And Panel For ES Series Recessed AC Only EST7: Trim And Panel For ES Series Recessed Self-Powered	Face Options 1=Single 2=Double Battery _ = No Battery 70= Nickel Cadmium Mounting _ = Recessed Unit S: Surface Unit	Trim Finish _ = Brushed Aluminum WH=White BL=Black BZ=Bronze PS=Polished Brass PA= Polished Aluminum	Letters / Background R=Red / Clear (Single Face Only) G=Green / Clear RM=Red / Mirror GM=Green / Mirror RW= Red / White Chevron Direction _ = No Chevron AR: Right Chevron AL: Left Chevron DA: Double Chevron ARL: Chevrons Right / Left (Double Face Only)	Voltage _ = 120 / 277V Mounting Options C=Ceiling W=Wall E= End P= Pendant
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ENERGY DATA

Maximum power consumption under all charge conditions:

LED Exits, Red Letters, AC Only

Input Power:
120V = 3.8W
277V = 3.9W
Input Current (Max.):
120V = .03
277V = .02
Power Factor:
120V = .93
277V = .93

LED Exits, Red Letters, Self-Powered

Input Power:
120V = 4.6W
277V = 4.8W
Input Current (Max.):
120V = .04
277V = .02
Power Factor:
120V = .90
277V = .89

ENERGY DATA

LED Exits, Green Letters, AC Only

Input Power:
120V = 1.4W
277V = 1.5W
Input Current (Max.):
120V = .02
277V = .01
Power Factor:
120V = .67
277V = .66

LED Exits, Green Letters, Self-Powered

Input Power:
120V = 1.9W
277V = 2.0W
Input Current (Max.):
120V = .03
277V = .01
Power Factor:
120V = .63
277V = .61

TECHNICAL DATA

Lamp

Optimized for energy efficiency and aesthetic appearance, the ES Series Exit uses superbright, long-life LED lamps to illuminate the exit lens.

Power Housing (Self-Powered Only)

Dual voltage 120/277 VAC power housing is contained in the rough-in section. It will automatically illuminate the sign face for 90 minutes during a power interruption. Power housing is equipped with maintenance-free sealed nickel cadmium batteries.

Electrical

The electronics with quick connect connectors and simple wiring combine to make installation of the ES Series Exit fast and easy. Self-Powered and AC versions are standard 120/277 VAC. If necessary, ES Series housings and trim assemblies can be shipped separately for rough-in situations.

Housing Construction

The rugged 18-gauge, die formed steel housing has conduit knockouts for easy AC wiring connections. Fully adjustable, captive bar hangers make installation easy.

Trim

The high-impact, clear acrylic lens panel with precision molded lettering and NFPA 101 compliant directional chevrons makes the face panel of this exit sign clearly superior. A choice of red or deep green letters in clear, mirror, or

white background inserts (deep green available in clear or mirror only) enables precise control of the fixture's aesthetic appearance. The rugged extruded trim plate is attached to the housing back box with torsion springs to insure a tight fit against any wall or ceiling surface. The standard brushed aluminum finish blends with most any decor. Other finishes are available.

Solid-State Charger (Self-Powered Only)

Supplied with a 120/277 VAC, voltage regulated solid-state charger. Immediately upon restoration of AC current after a power failure, the charger provides a high charge rate. Solid-state circuitry recharges the battery following a power failure in accordance with UL 924.

Brownout Circuit (Self-Powered Only)

The brownout circuit on Sure-Lites' exits monitors the flow of AC current to the exit and activates the emergency lighting system when a predetermined reduction of AC power occurs. This dip in voltage will cause most ballasted fixtures to extinguish causing loss of normal lighting even though a total power failure has not occurred.

Solid-State Transfer (Self-Powered Only)

The ES Series Exit incorporates solid-state switching which eliminates corroded and pitted contacts or mechanical failures associated with relays. The switching circuit is designed to

detect a loss of AC voltage and automatically energizes the LED lamps. Upon restoration of AC power, the emergency circuit will switch off and the charger will automatically recharge the battery.

Test Switch/Power Indicator Light (Self-Powered Only)

Conveniently located combination Test Switch/Power Indicator Light allows for manual verification of proper operation of the transfer circuit and emergency lamps.

Sealed Nickel Cadmium Battery (Self-Powered Only)

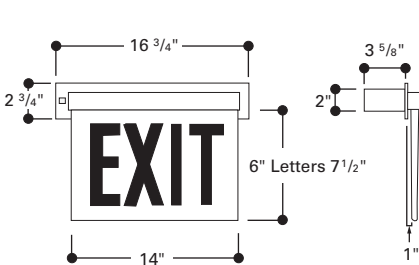
Sure-Lites sealed nickel cadmium batteries are maintenance-free with a life expectancy of 15 years. The sealed rechargeable nickel cadmium battery offers high discharge rates and stable performance over a wide range of temperatures.

Warranty

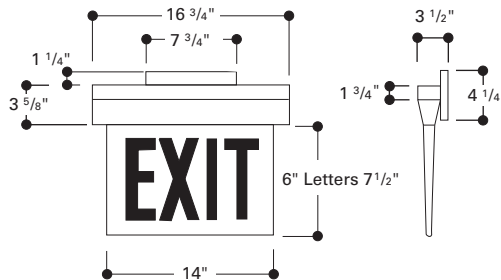
All Sure-Lites' products are backed by a firm one-year warranty against defects in material and workmanship. Maintenance-free, long-life, sealed nickel cadmium batteries carry a fifteen-year pro-rata warranty.

MOUNTING OPTIONS

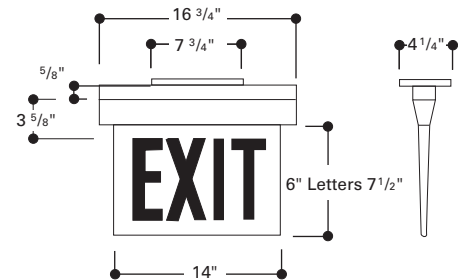
RECESSED, WALL MOUNT



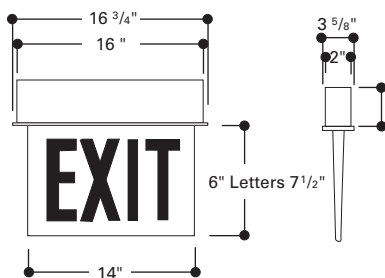
SURFACE, WALL MOUNT



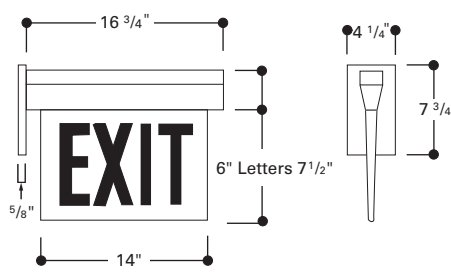
SURFACE, CEILING MOUNT



RECESSED, CEILING MOUNT



SURFACE, END MOUNT



SURFACE, PENDANT MOUNT

