

## DESCRIPTION

The Sure-Lites ELX Series Recessed 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 or 120/347 VAC, 60Hz
- Long-life energy efficient LED lamps
- Line-latching
- Solid-state Voltage Limited Charger
- Solid-state Switching
- Brownout Circuit
- Low-Voltage Disconnect
- Overload/Short Circuit Protection
- Test Switch/Power Indicator Light
- Photocell Test Switch (requires accessory laser for activation)
- Fully recharged in 24 hours
- Watchguard EMS Self-Diagnostic System

### Battery

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

### Housing Construction

- 20-gauge steel housing with nine conduit knockouts
- Recessed housing available for ceiling, wall or end mounting
- Adjustable hanger bars
- Modular connectors facilitate installation and maintenance
- Electronics housed in back box and on trim plate

### Trim/Housing Plate

- Injection molded, high-impact acrylic panel
- NFPA 101 compliant chevron directional indicators (when specified)
- Die cast trim plate in Brushed Aluminum (standard), White, and Black
- Red or green letter colors
- Clear, mirror, or white insert background
- Mirror background and white inserts provided standard with all exits (Mirror background installed on all exit faces)

- Molded letters and chevrons improve aesthetic appearance and increase visibility
- Torsion springs secure trim plate to housing - no visible mounting hardware

### Code Compliance

- UL 924 Listed
- Life Safety NFPA 101
- NEC/OSHA
- Most State and Local Codes

### Warranty

- Exit: 5-year
- Battery: 15-year pro-rata

### Lamp Data

- Nine super-bright, long-life LEDs provide uniform light output red or green lettering only
- Extremely economical lamp operation
- DC: LED Lamps



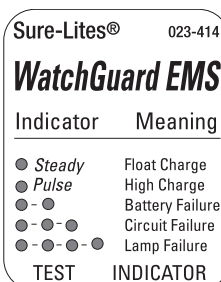
## ELX SERIES

EDGE LIT EXITS  
SELF POWERED EMERGENCY  
LED LAMPS  
SELF-DIAGNOSTIC SYSTEM  
WATCHGUARD EMS  
FASTEST REMOTE  
LASER TEST  
EXIT LIGHTING

## ORDERING INFORMATION

SAMPLE NUMBER: ELX717000RCSD

| Series   | Face Options   | Battery                                | Factory Options                                  | Trim Finish                                      |
|--|--|--|--|--|
| ELX7=Self-Powered, LED Lamps   | 1=Single<br>2=Double   | 70=Nickel Cadmium                      | 00=No Options<br>90=DC Only Fire Alarm Interface | [Blank]=Brushed Aluminum<br>BL=Black<br>WH=White |
| Letters / Background   | Chevron Direction  | Voltage                                |  |  |
| G=Green / Clear (Single Face Only)<br>R=Red / Clear (Single Face Only) | [Blank]=No Chevron<br>AL=Left Chevron<br>AR=Right Chevron<br>ARL=Chevrons Right / Left (Double Face Only)<br>DA=Double Chevron | [Blank]=120 / 277V<br>47=120 / 347 VAC |  |  |
| Mounting Options   | Options  | Accessories                            |  |  |
| C=Ceiling<br>E=End<br>W=Wall   | SD=Self-Diagnostic   | LASER=Key Chain, Red Laser Pointer     |  |  |



## CHEVRON CONFIGURATIONS

|     | FRONT  | BACK   | FACE   |
|-----|--------|--------|--------|
| AR  | EXIT>  | Blank  | Single |
| AL  | <EXIT  | Blank  | Single |
| DA  | <EXIT> | Blank  | Single |
| DA  | <EXIT> | <EXIT> | Double |
| ARL | EXIT>  | <EXIT  | Double |

## ENERGY DATA

Maximum power consumption under all charge conditions:

## LED EXITS, RED LETTERS SELF-DIAGNOSTICS

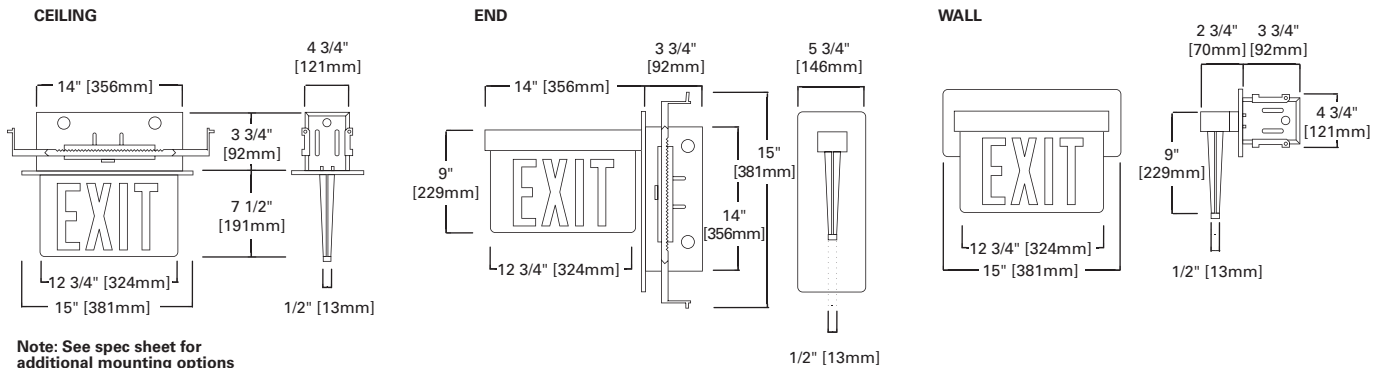
Input Power:  
120V = 4.4W  
277V = 4.4W  
Input Current (Max.):  
120V = .04A  
277V = .02A  
Power Factor:  
120V = >.87  
277V = >.86  
T.H.D.:  
120V = 27.8%  
277V = 28.1%

## LED Exits, Green Letters

### Self-Diagnostics

Input Power:  
120V = 4.8W  
277V = 4.8W  
Input Current (Max.):  
120V = .05A  
277V = .02A  
Power Factor:  
120V = >.89  
277V = >.89  
T.H.D.:  
120V = 25.5%  
277V = 25.7%

## MOUNTING OPTIONS



## TECHNICAL DATA

**Lamps**

Optimized for energy efficiency and aesthetic appearance, the ELX Series Exit uses super-bright, longlife LED lamps to illuminate the exit lens.

**Power Pack**

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

**Electrical**

The electronics with quick connect AC power connectors and simple wiring combine to make installation of the ELX Series Exit fast and easy. Self-Powered versions are standard 120/277 VAC or can also be specified as 120/347 VAC. If necessary, ELX Series electronics, housings, and trim assemblies can be shipped separately for rough-in situations.

**Housing Construction**

The rugged 20-gauge die-formed cold rolled steel housing is finished with white corrosion resistant polyester powder coat paint. Housing has conduit knockouts in top, end and sides for easy AC wiring connections. Fully adjustable, captive bar hangers make installation easy. The ELX Series Exit is compatible with grid ceiling systems or hard ceiling and wall applications. Ceiling, end, and wall mount fixtures use one common housing which is suitable for mounting in 2 x 4 construction.

**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 green letter colors and clear, mirror, or white drop-in background inserts enables precise control of the fixture's aesthetic appearance. The rugged die cast trim plate is attached to the housing back box with torsion springs to insure a tight fit against any wall or ceiling surface. Foam gasketing insures against unsightly light leaks. The standard brushed aluminum finish blends with most any decor. Other finishes are available.

**Line-Latched**

Sure-Lites' line-latched electronic circuitry makes installation easy and economical. A labor efficient AC activated load switch prevents

the lamps from turning on during installation to a non-energized AC circuit. Line-latching eliminates the need for a contractor's return to a job site to connect the batteries when the building's main power is turned on.

**Solid-State Charger**

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. The charge circuit reacts to the condition of the battery and alters the rate of charge in order to maintain peak battery capacity and maximize battery life. Solid-state construction recharges the battery following a power failure in accordance with UL 924.

**Overload and Short Circuit Protection**

The solid-state overload monitoring device in the DC circuit disconnects the lamp load from the battery should excessive wattage demands be made and automatically resets when the overload or short circuit is removed. This overload current protective feature eliminates the need for fuses or circuit breakers for the DC load.

**Brownout Circuit**

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**

The ELX 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 pcba. Upon restoration of AC power, the emergency circuit will switch off and the charger will automatically recharge the battery.

**Test Switch/Power Indicator Light**

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

**Photocell Test Switch**

Allows verification of proper operation of the

transfer circuit and emergency lamps with a laser pointer (laser is sold as an accessory). The emergency lamps will test for 30 seconds when activated.

**Self-Diagnostics**

The self-diagnostic unit will automatically perform all tests required by UL924, and NFPA 101. The system indicates the status of the exit at all times using the LED indicator near the test switch on the trim plate. A 90 minute battery power (emergency mode) simulation test will occur randomly once every six months. A 30 second battery power simulation test will occur every 30 days. The charger function is tested upon initial power-up and after every battery discharge cycle thereafter. The exit lamp circuit and AC/DC power transfer circuit is monitored continuously. The charging mode is also monitored. The unit goes into a high charge mode for 24 hours the first time AC power is applied and when a discharge causes the battery voltage to fall below its nominal value. Pressing the test switch causes the unit to use battery power and test the battery capacity for 30 seconds. The LED indicator is off when the unit is in the emergency mode and on continuously when the unit is fully charged. The LED blinks when the unit is in the high charge mode. It blinks twice (then repeats) when the battery needs to be replaced, or if it is disconnected. It blinks three times if there is a circuit board (charger or AC/DC transfer function) failure, and four times if the exit lamps fail.

**Sealed Nickel Cadmium Battery**

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. The specially designed resealable vent automatically controls cell pressure, assuring safety and reliability. This battery is best suited for harsh ambient temperatures because the electrolyte is not active in the electrochemical process.

**Warranty**

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