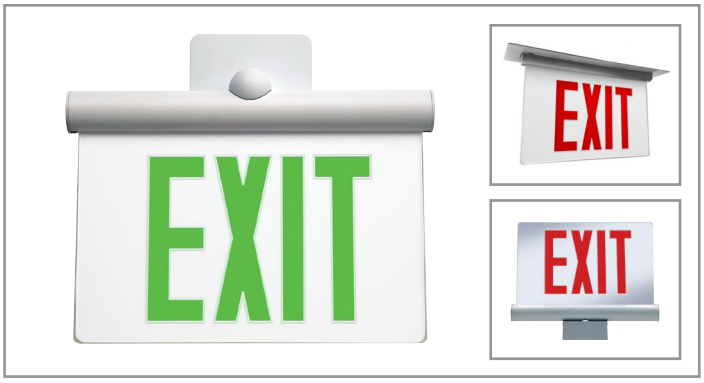
Project		Catalog #		Type	
Prepared by		Notes		Date	



Sure-Lites

ARCEL Series

Architectural Edge Lit Exit Sign

Typical Applications

Office • Education • Healthcare • Hospitality • Retail

Interactive Menu

- Order Information page 2
- Energy Performance page 2
- Technical Data page 3
- Self-diagnosticss page 5
- Product Warranty

Product Certification

CERTIFIED

T20 Certified to California Title 20 Appliance Database

T20 for battery back-up units

Product Features

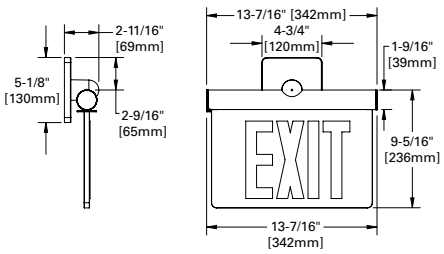
damp location

Top Product Features

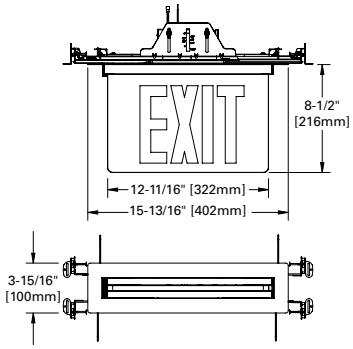
- Architectural look, slim housing profile and no visible screws
- Aluminum housing available in brushed aluminum, white and black finishes
- Surface mount square or round mounting canopy option for customized look
- High impact acrylic lens panel
- Clear, mirrored or white background lens
- Bright, long-life LED source provides uniform illumination
- Dual voltage input, 120/277 VAC, 60 Hz
- 90 minutes of emergency power in self-powered (battery backup) models
- Self-powered (battery backup) models have self-diagnostics standard
- EZ key external battery disconnect prevents battery discharge during installation

Dimensional and Mounting Details

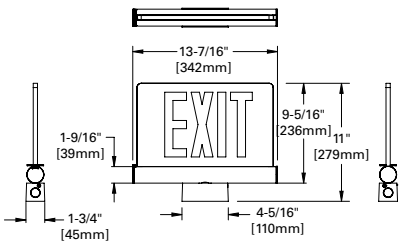
Surface Wall Mount, Center Canopy



Recessed Ceiling Mount



Mullion / Inverted Mount



additional product diagrams

Ordering Information

SAMPLE ORDER NUMBER: **ARCEL72RMSSSD**

Complete Fixture

Series	Operation	Face Options	LED Color	Lens Background	Housing Finish	Mounting	Self-Diagnostics	Fire Alarm Interface
ARCEL=6" Letter Standard	**6**=AC only **7**=battery backup	**1**=Single **2**=Double	**R**=Red **G**=Green	**C**=Clear (Single only) **M**=Mirror **W**=White	**Stock Colors** **[Blank]**=Brushed Aluminum **WH**=White **Made to order Color** **BK**=Black	**SS**=Surface, square canopy **SR**=Surface, round canopy **RC**=Recessed **MM**=Mullion **PM**=Pendant	**[Blank]**=AC Only **SD**=Self-diagnostics standard with battery	Fire Alarm Interface standard
		Notes (1) Chevrons field installable.		**Notes** (2) Mullion Mount or Inverted lens panels only offered with single face, mirror back ground.	**Notes** (3) Black finish has significant lead time. Contact factory for details.			

Accessories

Accessories (order separately)
CAX18PKWH=18" Pendant Kit, White **CAX18PKBK**=18" Pendant Kit, Black **CAX18PKHTWH**=18" Hang True Pendant Kit, White **CAX18PKHTBK**=18" Hang True Pendant Kit, Black
Notes Contact Cooper Lighting Solutions representative for custom lengths.

Shipping Information:

- The ARCEL housings and lens panels are shipped in separate boxes.
- Surface mount ARCEL exit signs ship in three boxes: housings, mounting means and lens panels are in separate boxes.
- Recessed mount ARCEL exit signs ship in two boxes: housings and lens panels are in separate boxes.

Product Specifications

Electronic

- Dual voltage input 120/277 VAC, 60Hz
- Long-life energy efficient LED lamps
- Sure-Lites EZ Key patented external battery disconnect feature - prevents unnecessary battery drainage, saves on installation time
- Solid-state Voltage Charger
- Solid-state Switching
- Brownout Circuit
- Low-Voltage disconnect
- Test Switch/Power Indicator Light

Battery

- Sealed nickel cadmium
- Maintenance free, long life
- Full recharge time, 24 hrs (max.)

Housing Construction

- Die cast and cylindrical extruded aluminum housing
- The ARCEL housings and lens panels are shipped in separate boxes.
- Surface mount ARCEL exits signs will have a box for the housing, mounting canopy and lens panel.
- Recessed mount ARCEL exit signs will have a box for the housing and lens panels.

Surface Mounting

- No visible screws
- Surface mount J-box canopies can be round or square, provided with center and off center knockouts to adjust placement of exit sign mounting arm

Recessed Mounting

- Recessed housing for ceiling mounting
- Adjustable hanger bars
- Connectors facilitate quick installation and maintenance
- Convenient 1/2" knockouts provided in top and end of recessed mounted housing

Lens

- Injection molded high-impact acrylic panel
- NFPA 101 compliant field installable chevron directional indicators
- Deep red and deep green letter colors
- 6" Letters
- Clear, mirror, or white background

Code Compliance

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

Lamp Data

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

Limited Warranty

- Exit: 5-year limited warranty
- Battery: 7-year pro-rata (self-powered only)

Energy and Performance Data

Maximum power consumption under all charge conditions:

LED Exits – Red Letters, AC Only

Input Power	Input Current (Max.):	Power Factor:
120V = 1.30W	120V = 0.06	120V = 0.16
277V = 1.20W	277V = 0.06	277V = 0.07

LED Exits, Green Letters, AC Only

Input Power	Input Current (Max.):	Power Factor:
120V = 1.30W	120V = 0.06	120V = 0.16
277V = 1.20W	277V = 0.06	277V = 0.07

LED Exits – Red Letters, Self-Powered

Input Power	Input Current (Max.):	Power Factor:
120V = 1.74W	120V = 0.07	120V = 0.17
277V = 1.93W	277V = 0.07	277V = 0.09

LED Exits, Green Letters, Self-Powered

Input Power	Input Current (Max.):	Power Factor:
120V = 1.86W	120V = 0.08	120V = 0.17
277V = 2.32W	277V = 0.08	277V = 0.10

Technical Data

Lamp
- Long life, superbright LEDs provide uniform illumination of the exit lens
- Consumes on average less than one watt

Electrical
- Dual voltage input 120/277 VAC, 60 Hz

Housing
- Die cast and cylindrical extruded aluminum housing
- Surface mounting can be back wall, end mounted or ceiling mounted, with pendant or mullion mount options
- Recessed housing for ceiling installation
- The standard brushed aluminum finish blends with most decors, with additional choices of white (stock) or black (made to order) finishes available
- Surface mount ARCEL exit signs ship in three boxes: housings, mounting means and lens panels are in separate boxes
- Recessed mount ARCEL exit signs ship in two boxes: housings and lens panels are in separate boxes

Lens
- High impact acrylic lens panels with precision lettering
- Deep red or deep green letters available on clear, mirrored or white back grounds
- NFPA 101 compliant field installable directional chevrons provide simplified ordering process

Sure-Lites EZ Key External Battery Disconnect (Self Powered Only)
- The Patented EZ key is an external battery disconnect that allows the product to be shipped with the battery connected internally.
- This prevents battery drain during the construction cycle to insure that the battery isn't damaged and is fully charged for inspection.
- EZ Key also saves the labor of internally connecting the battery after construction is complete.

Brownout Circuit (Self-Powered Only)
- Monitors flow of AC current
- Activates the emergency lighting system when a predetermined reduction/dip of AC power occurs (a dip in voltage will cause most ballasted products to extinguish, causing loss of normal lighting though a total power failure has not occurred)

Low Voltage Disconnect (Self Powered Only)
- Low-voltage circuitry disconnects the lighting load when battery's terminal voltage falls
- Disconnect remains in effect until normal utility power is restored, preventing deep battery discharge

Test Switch/Power Indicator Light (Self-Powered Only)
- Switch located on the side of the exit permits the activation of the emergency circuit for complete operational systems check
- Indicator light provides visual assurance the AC power is on

Self-Diagnostics Option (Self Powered Only)
- Automatically performs all tests required by UL924 and NFPA 101
- Indicates the status of the exit at all times using the LED indicator near the test switch on the side of the unit
- 90-minute battery power (emergency mode) simulation test occurs once every 12 months
- 30-second battery power simulation test occurs every 30 days

Sealed Nickel Cadmium Battery (Self-Powered Only)
- Sealed, maintenance-free nickel cadmium battery with 10-year typical life expectancy

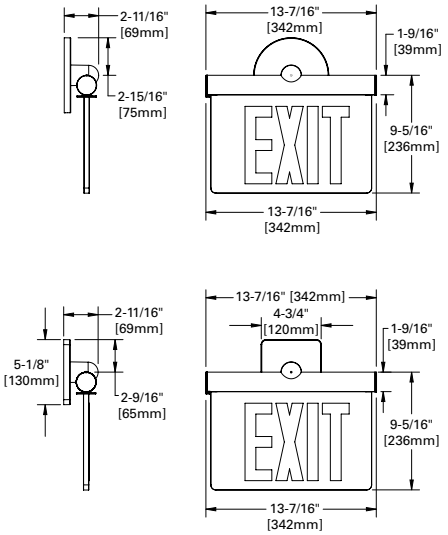
Photocell Test Switch
- Allows verification of proper operation of the transfer circuit and emergency lamps with a laser pointer (laser is sold as an accessory). The emergency lamps will test for 30 seconds when activated.

Limited Warranty
- Five-year warranty against defects in material and workmanship
- 7-year prorated battery warranty

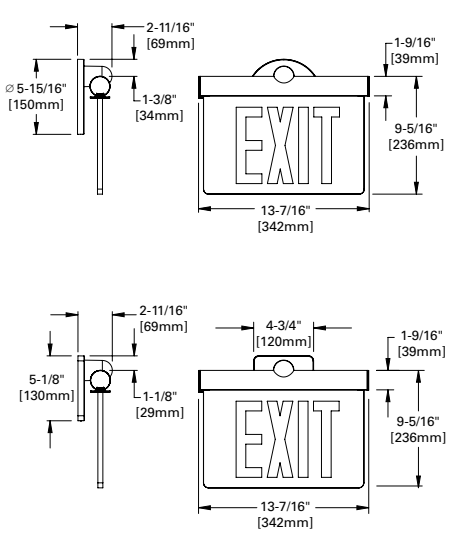
Laser tester
Part Number=LASER
(sold separately)

Dimensional and Mounting Details

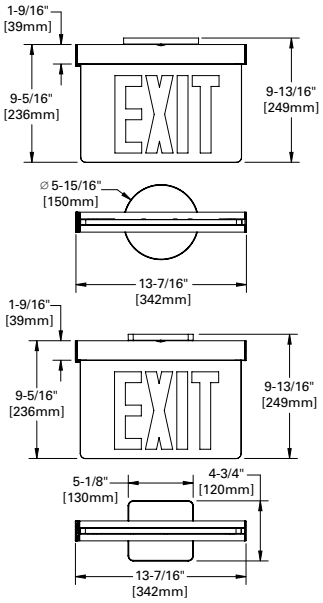
Surface Wall Mount, Center Canopy



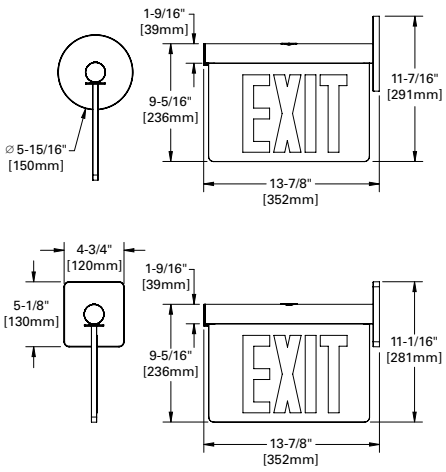
Surface Wall Mount, Offset Canopy



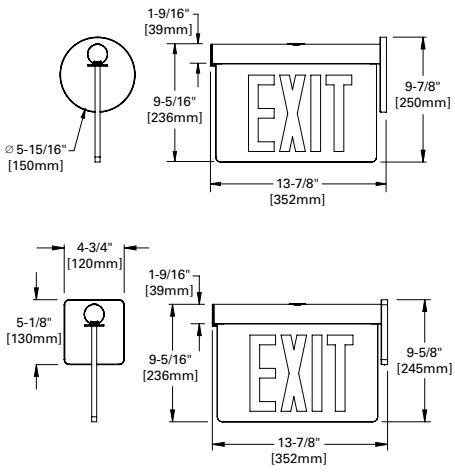
Surface Ceiling Mount



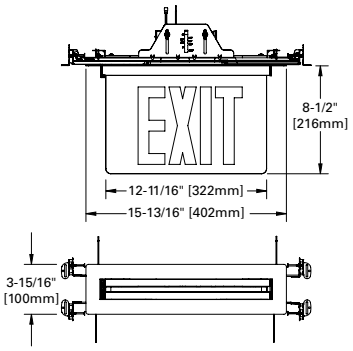
End Mount, Center Canopy



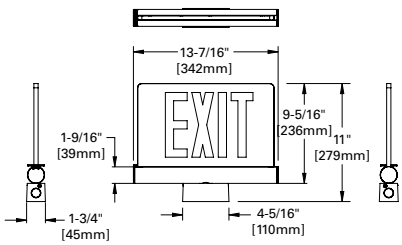
End Mount, Offset Canopy



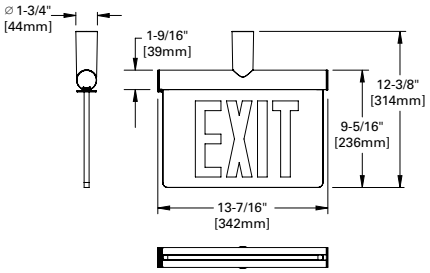
Recessed Ceiling Mount



Mullion / Inverted Mount



Pendant Mount



Self-Diagnostics Testing Operations

The Sure-Lites Self-Diagnostics is continuously monitoring your emergency fixture, and will signal any failure through the 3-color indicator LED.

Initial Operation:
When the unit is first powered up it will go into a 24-hour fast charge and the indicator LED will pulse green. Once the unit has fully charged it will perform a self-calibration. After self-calibration, the LED will change to steady green indicating the unit is fully charged and float charging the battery to maintain readiness.

Automatic Testing:
The unit will perform a battery capacity, lamp/LED, and charge circuit test every 30 days for 30 seconds. During this time, the indicator LED will change to a steady yellow. It will perform a full battery capacity test (90-minute) once per year. During this time, the indicator LED will change to a blinking yellow.

Manual Testing:
- 10-Second “Installation” test - Press and release the test button once during fast charge (blinking green) to initiate a 10-second quick test. The ARCEL will switch to emergency mode for 10 seconds allowing the installer to verify proper installation of the unit, and the LED indicator will turn solid yelow.
- 30-Second Test - Press and release the test button once during float charge (steady green). The indicator LED will turn steady yellow to indicate the unit is performing a 30-second test of the batteries and lamps/LEDs.
- 90-Minute Test - Press and release the test button a second time during a 30-second test (steady yellow) to change to a 90-minute test. During this test, the LED indicator will change to blinking yellow, and the circuit will perform a full battery capacity, charge circuit, and LED test.
- Canceling Test - Press and release the test button during the 90-minute test (flashing yellow) to return the fixture to its original state (fast charge or float charge).

Laser Test:
The ARCEL series is equipped with a Laser Test function that allows the unit to be manually tested without the need to physically press the test button. Shining a laser pointer in test button on the bottom of the unit has the same effect as a press and release of the test button.

Clearing Failure Codes:
- A battery failure (LED two blink red) can be cleared by disconnecting the battery with the EZ key. Disconnecting the battery and AC power or performing a full 90-minute discharge will reset the error code, however, it will return if the battery is faulty.
- Charge Circuit (LED three blink red) and lamp/LED failure (LED four blink red) will clear when the unit successfully passes a manual or automatic 30-second test.

Indicators:
- LED Off - No power to unit, emergency mode.
- LED Steady Green - Unit is fully charged and is float charging the battery to maintain readiness.
- LED Green Pulse - Unit is in a 24-hour fast charge of the battery.
- LED Two Blink Red - Battery has failed a capacity test, or the battery is disconnected. See “Clearing Failure Codes” above.
- LED Three Blink Red - Battery charge circuit has failed. See “Clearing Failure Codes” above.
- LED Four Blink Red - Lamps have burned out, or on an EXIT/Combo, 50% or more of the LEDs have failed. See “Clearing Failure Codes” above.
- LED Steady Yellow - 30-second test or 10-second quick test (Fast Charge only).
- LED Blinking Yellow - 90-minute test.

Maintenance:
We recommend that the equipment be tested every 30 days and regularly in accordance with local codes.

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Specifications and dimensions
subject to change without notice.