

## **SRE-2010E Outdoor Elite Straight Rail Stairlift** **Technical Specifications**

**MODEL NUMBER:** SRE-2010E

**ETL-Intertek C-US Listed: Control Number:** 4004689

**PERFORMANCE STANDARDS:**

**ANSI/ASME: A18.1-1999 (Sec. 7) Safety Standards for Platform Lifts and Stairway Chairlifts**

**ANSI/ASME: A18.1-2003 (Sec. 7) Safety Standards for Platform Lifts and Stairway Chairlifts**

**ANSI/ASME: A18.1-2005 (Sec. 7) Safety Standards for Platform Lifts and Stairway Chairlifts**

**ANSI/ASME: A18.1-2008 (Sec. 7) Safety Standards for Platform Lifts and Stairway Chairlifts**

**ANSI/ASME: A18.1-2011 (Sec. 7) Safety Standards for Platform Lifts and Stairway Chairlifts**

**ANSI/ASME: A18.1-2014 (Sec. 7) Safety Standards for Platform Lifts and Stairway Chairlifts**

**CSA B613 Private Residence Lifts**

**ANSI/ASME: CSA B44.1/ASME-A17.5 Elevator and Escalator Electrical Equipment**

**RATED LOAD:** 400 lb (181 kg) maximum

**NUMBER OF PASSENGERS:** 1

**CONSTRUCTION:** exterior-grade powder coated steel with an e-coat undercoating; stainless steel and exterior-grade hardware; weatherized electronics and controls

**POWER SOURCE:** 24VDC comprised of 2 each 7AH 12 volt sealed maintenance-free lead acid batteries; On/Off power switch to prevent battery drain over lengthy storage periods

**CHARGER:** 105-230VAC/1.5 A, 24VDC/2A continuous monitoring, full primary cut off. Charger must be located inside to avoid the elements. All exterior wiring is low voltage (24V)

**CHARGING SYSTEM:** carriage charges at either end of rail on innovative watertight sliding contacts

**DRIVE:** 24VDC direct drive gear-motor, 2 pole rated .68 HP, 58:1 right angle self-locking worm gear box, 41.5 RPM on output shaft of gear box

**FINAL DRIVE:** integrated 8dp gear rack on rail with a spur gear on the gearbox output shaft

**MOTOR CONTROLLER:** custom 24 VDC PWM controller with acceleration ramping

**BRAKING:** dynamic motor braking through motor controller, self-locking worm gear box, and electro-mechanical motor brake

**CALL/SEND CONTROL:** 2.4 GHz RF wireless control with interference suppression; momentary switching requiring a user to continuously hold the button to control unit; keyed controls standard

**ARMREST CONTROL:** 3-position, momentary rocker switch requiring user to continuously hold rocker switch to control unit; switch mounted under armrest; keyed control standard

**SUPPORTS:** clamps anchored to stair tread; normal rail position is 2" (50.8 mm) above step nose; number of clamps dependent on the length of rail; optional height-adjustable clamps available

**ANGLE:** adjustable from 0° to 45° standard; custom to 50°

**SPEED:** maximum top speed 25 ft/min (0.13 m/s); actual speed varies depending on rider weight

**LENGTH OF TRACK:** 15 feet 9 inches (4.9 m) and 19 feet 8 inches (6.1 m) standard; dealer to cut to fit the actual length of the stair (see application guide)

**TRACK CONSTRUCTION:** aluminum extruded rail with covered steel gear rack; bolted joint plate at each rail joint

**FOOTREST:** folding footrest with safety sensor panel, adjustable height settings and handle actuator

**SEAT:** padded marine grade vinyl, folding and swivel with stops at 45° (bottom), 0° (forward), 60° (top), and 90° (top); multiple-position seat height adjustments

**ARMRESTS:** fixed to seat frame; armrest may be individually rotated towards seat back for smaller profile when not in use and to facilitate transfers; width adjustment of armrests: 4" (102 mm)

**CANOPY:** dual-lever, weather-resistant cover

**SAFETY EQUIPMENT:**

- 1) seat swivel switch allowing operation only when chair is in center position
- 2) carriage and footrest safety switches
- 3) retractable seat positioning belt
- 4) charging light (green) on carriage
- 5) 30A manual reset breaker on motor control circuit
- 6) 5A fuse on control circuits
- 7) final end stop bumper at each end of rail
- 8) final limit switch
- 9) full diagnostic interconnect circuit board

**BATTERY CAPACITY/POWER OUTAGE:** cycles: variable depending on angle, length of run, ambient temperature and rider weight  
batteries: between 28 and 36 hours if power is disconnected

**WEIGHT OF UNIT:** 300 lb (136 kg) without rider in a typical 16 foot (4.9 m) installation

**TESTING PERFORMED:**

- 1) life cycle testing with full rated load at 45° on a 16-foot (4.9 m) rail
- 2) battery charger UL tested and listed to standard UL1012
- 3) self-locking gear box statically tested with 3200 lb (1451 kg) (8 times rated load) on a 45° rail for 5 minutes with no carriage movement; test performed at manufacturer's location
- 4) repetitive tests performed to determine power outage cycling
- 5) electrical discharge to ground testing
- 6) electrical enclosure IPX3 (IEC 529), providing protection against spraying water
- 7) recommended environmental operating temperature range: 0°F (-15°C) to 125°F (50°C)

**COMMERCIAL PACKAGE:** not available