

## **SRE-3000 Elan Straight Rail Stairlift** **Technical Specifications**

**MODEL NUMBER:** SRE-3000

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

**PERFORMANCE STANDARDS:**

**PRIVATE RESIDENCE ONLY**

**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:** 300 lb (136 kg) maximum

**NUMBER OF PASSENGERS:** 1

**POWER SOURCE:** 24VDC comprised of 2 each 3AH 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 input, 24VDC/1 A output continuous monitoring, full primary cut off

**DRIVE:** 24VDC, 16A direct drive self-locking positive geared motor, 2 pole rated 442 lb-in (50Nm) torque,  
25.5 rpm output speed, with right angle worm gear box (0.18 HP max.)

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

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

**BRAKING:** dynamic motor braking through the motor controller, worm gear box, electro-mechanical motor  
brake and overspeed protection

**CALL/SEND CONTROL:** infra-red wireless control; momentary switching requiring a user to continuously hold button to control unit

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

**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:** 22° to 45° (specials up to 52°)

**SPEED:** maximum top speed 18 ft/min (0.09 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 metal gear rack; bolted joint plate at each rail joint

**FOOTREST:** folding footrest with safety sensor panel

**SEAT:** padded, folding and swivel with stops at 0° (forward), 67° (top), and 90° (top); no swivel at lower landing; 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

**SAFETY EQUIPMENT:**

- 1) seat swivel switch allowing operation only when chair is in center position
- 2) carriage safety switches
- 3) seat positioning belt
- 4) 25A manual reset breaker on motor control circuit
- 5) final end stop bumper at each end of rail
- 6) final limit switch
- 7) full diagnostic alarms on circuit board
- 8) armrest safety switches to insure barrier arms down to operate
- 9) Overspeed protection against free fall or run away condition
- 10) charging light on charger
- 11) 5A fuse on control circuits

**BATTERY CAPACITY/POWER OUTAGE:**

Cycles: variable depending on angle, length of run, ambient temperature, and rider weight  
Batteries: between 12 and 24 hours if power is disconnected

**WEIGHT OF UNIT:**

185 lb (86 kg) without rider in a typical 15'-9" (4.9 m) installation

**TESTING PERFORMED:**

- 1) Life cycle testing with full rated load at 45 degree on a 15'-9" rail
- 2) battery charger UL tested and listed to UL 1310
- 3) self-locking gear box statically tested with 2100 lb (953kg)(7 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) Overspeed free fall testing for repeated usage

**OPTIONS:**

- 1) keyed call/send controls
- 2) power swivel seat at top landing (up to 85° of rotation)
- 3) power folding footrest
- 4) manual folding rail
- 5) power folding rail