

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