

SRE-3050 Elan Straight Rail Stairlift
Technical Specifications

MODEL NUMBER: SRE-3050

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

ANSI/ASME: A18.1-2017 (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

MODEL NUMBER: SRE-3050G

ETL-Intertek EU Listed: Control Number: 4004689

PERFORMANCE STANDARDS:

EN 81-40: 2008 Safety rules for the construction and installation of lifts. Special lifts for the transport of persons and goods. Stairlifts and inclined lifting platforms intended for persons with impaired mobility

The SRE-3050 Elan is NOT recommended for these type of users:

- Those who use a scoot-pivot transfer from a wheelchair without weight bearing through their legs, whose full body weight is placed on a single stairlift armrest.
- Those with leg weakness, during stand to sit transfer, whose knees buckle with uncontrolled lowering to the stairlift seat.

For the above type of users, the SRE-2010 Elite IS recommended.

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 1.5 inches (4.6 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 (SRE-3050G)
- 9) Overspeed protection against free fall or run away condition
- 10) Diagnostic/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:

180 lb (82 kg) without rider in a typical 15'-1.5" (4.6 m) installation (packaged)

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 1012
- 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