

STANDARD INFORMATION

Standard Number: ASME A18.1

Standard Name: Safety Standard for Platform Lifts and Stairway Chairlifts

Standard Edition and Issue Date: 2017 Edition Dated October 5, 2017

Date of Revision: October 5, 2017

Date of Previous Revision of Standard: September 12, 2014

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **January 16, 2019**

IMPACT, OVERVIEW, AND ACTION REQUIRED

Impact Statement: A review of all Listing Reports is necessary to determine which products comply with new/revise requirements and which products will require re-evaluation. **NOTE:** Effective immediately, this revised standard will be exclusively used for evaluation of new products unless the Applicant requests in writing that current requirements be used along with their understanding that their listings will be withdrawn on Effective Date noted above, unless the product is found to comply with new/revise requirements.

Overview of Changes: Specific details of new/revise requirements are found in table below.

- Runway enclosure clearance.
- New section added regarding relocatable lifts.
- Revision of rated loads.
- Update of emergency signals.
- Addition requirements for safeties and speed governors.
- Engineering Tests — Type Testing of Safeties on Inclined Platform Lifts and Inclined Stairway Chairlifts.
- New section maintenance of platform lifts and stairway chairlifts added.

If the applicable requirements noted in the table are not described in your report(s), these requirements will need to be confirmed as met and added to your report(s) such as markings, instructions, test results, etc. (as required).

Client Action Required:

Information – To assist our Engineer with review of your Listing Reports, please submit technical information in response to the new/revise paragraphs noted in the attached or explain why these new/revise requirements do not apply to your product (s).

Current Listings Not Active? – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records. We will do this at no charge as long as Intertek is notified in writing prior to the review of your reports.



STANDARD INFORMATION

CLAUSE	VERDICT	COMMENT
<i>Additions to existing requirements are <u>underlined</u> and deletions are shown lined-out below.</i>		
2	Info	VERTICAL PLATFORM LIFTS
2.1	Info	Runways
2.1.1	Info	Runway Enclosure Provided
2.1.1.7		<p><u>A minimum of one</u> platform sides not used for entrance or exit shall be guarded by a platform enclosure wall of smooth construction to a height of at least 1 100mm (42 in.) above the platform floor with no openings other than those necessary for operation. Openings necessary for operation shall reject a ball 12 mm (0.5 in.) in diameter. A grab rail extending the length of at least one sidewall shall be provided at a height of 850 mm (34 in.) to 1 000 mm (38 in.). The running clearance between platform enclosure walls that extend less than 2 000 mm (79 in.) above the platform floor and the runway enclosure walls, vertical face of the machine housing, or other rigid surfaces shall be not less than 50 mm (2 in.). The running clearance between platform enclosure wall(s) that extend a minimum of 2 000 mm (79 in.) above the platform floor and runway walls or other surfaces shall be not less than 20 mm (0.75 in.). Running clearance between enclosure wall ends and the entrance and exit side of the runway shall be not less than 10 mm (0.375 in.) nor more than 75 mm (3 in.).</p>
<i>New clause added;</i>		
2.1.1.7.1		<p>Where the running clearance between the platform enclosure wall that extends less than 2 000 mm (79 in.) above the platform floor and the runway enclosure wall is less than 50 mm (2 in.), edge protection is required at the top edge of the platform enclosure wall. When edge protection is used, the clearance between the platform enclosure wall and vertical face of the machine housing or other surfaces shall be not less than 10 mm (0.375 in.) nor more than 20 mm (0.75 in.). Edge protection required shall be permitted to use mechanically operated, magnetically operated, optical, or static-type switches. When activated, the switch shall cause the electric power to be removed from the driving-machine motor and brake, if provided. When activated, the platform shall stop within 12 mm (0.5 in.) in the “UP” direction only.</p>
<i>New section added;</i>		
2.1.5		Relocatable Lifts
2.1.5.1		Relocatable lifts shall comply with section 2 and with paras. 2.1.5.2 through 2.1.5.6.
2.1.5.2		Level Surface. A device shall be provided to prevent the lift from operating if out of level greater than 1:20 (5%) in any direction.



2.1.5.3		Stability. When the relocatable lift is placed on an incline equal to 1:20 (5%) in any direction, the unsecured lift shall not tip over if a horizontal force of 550 N (125 lbf) is applied to the uppermost part of the lift in any direction, both with the full load centered in any of the four quadrants of the platform floor at maximum travel height and with no load.
2.1.5.4		Alignment. A sign shall be securely fastened to the lift in a location conspicuous to personnel setting up the relocatable lift stating: "Align lift with the upper landing edge per manufacturer's instructions."
2.1.5.5		Electrical Connection. A disconnecting means in accordance with ANSI/NFPA 70 shall be provided as part of the lift.
2.1.5.6		Wheels. Lifts that have wheels shall be operable only when the wheels are removed or retracted. The wheels shall not bear any load while the lift is in operation.
2.6	Info	Platforms
2.7	Info	Capacity, Speed, and Travel
2.7.1		Limitation of Load, Speed, and Travel. The rated load shall be not less than 200 kg 250 kg (550 lb) nor more than 475 kg (1,050 lb). Platforms with a floor greater than 1.4 m ² (15 ft ²) shall have a rated load of not less than 340 kg (750 lb). Platforms with a floor greater than 1.7 m ² (18 ft ²) shall have a rated load of not less than 475 kg (1,050 lb). The lift shall be capable of sustaining and lowering a load as specified in Fig. 9.7. The rated speed shall not exceed 0.15 m/s (30 ft/min). Travel of lifts conforming to para. 2.1.1 or 2.1.2 shall not exceed 4 250 mm (168 in.). Travel of lifts conforming to para. 2.1.3 or 2.1.5 shall not exceed 1 500 mm (60 in.). Travel of lifts conforming to para. 2.1.4 shall not exceed 600 mm (24 in.).
2.11		Emergency Signals If the platform is installed in an area where not visible to personnel at all times, emergency signaling devices shall be provided in accordance with the requirements of para. 2.11.1 or 2.11.2. Standby power shall be provided in accordance with para. 2.11.3. <u>Emergency signals shall comply with 2.11.1 through 2.11.3.</u>
3	Info	INCLINED PLATFORM LIFTS
3.11	Info	Emergency Signal
3.11.1		The lift shall be provided with an audible signaling device, located outside the platform area adjacent to lift operable from the emergency stop switch, marked also with "ALARM" or from a separate switch marked "ALARM" that is located in or adjacent to each platform operating panel. The switch marked "ALARM" shall illuminate when actuated. The signaling device shall be audible outside the platform and outside the runway. The audible signaling device shall have a rated sound pressure rating of not less than 80 70 dBA nor greater than 90 80 dBA at 3000 mm (120 in.) and respond without delay after the switch has been activated.
4	Info	INCLINED STAIRWAY CHAIRLIFTS



Safeties and Speed Governors

4.8 All carriages shall be provided with a safety, except for carriages of direct-plunger hydraulic lifts or other drive systems that are designed so that the failure of any single drive component cannot result in the platform overspeeding. The safety shall be actuated by the action of a speed governor or by the breakage or slackening of the suspension or support means. Where actuation is by a governor, the safety shall be set at a maximum speed of 0.4 m/s (75 ft/min). Where actuation is by breakage of the suspension or support means, the safety shall be set without delay, and independent of the speed governor, if provided. Safety parts shall conform to the requirements of para. 4.8.1. Governor ropes, where provided, shall conform to the requirements of para. 4.8.2. The application and release of safeties shall conform to the requirements of para. 4.8.3.

6 PRIVATE RESIDENCE INCLINED PLATFORM LIFTS

6.10 Operating Devices and Control Equipment

6.10.10 **Manual Operations.** Means shall be provided to permit lift or authorized personnel from a position outside the platform to raise or lower the platform manually ~~in the event of power failure, unless standby (emergency) power is provided along the path of travel.~~

7 Info PRIVATE RESIDENCE INCLINED STAIRWAY CHAIRLIFTS

All carriages shall be provided with a safety, except for platforms of direct-plunger hydraulic lifts ~~or self locking drives utilizing a lead screw or other positive gearing that will stop and hold the carriage with rated load within 100 mm (4 in.) of down travel after power is removed~~ other drive systems that are designed so that the failure of any single drive component cannot result in the platform overspeeding.

7.8 The safety shall be actuated by the action of a speed governor or by the breakage or slackening of the suspension or support means. Where actuation is by a governor, the safety shall be set at a maximum speed of 0.4 m/s (75 ft/min). Where actuation is by breakage or slackening of the suspension or support means, the safety shall be set without delay, and independent of the speed governor, if provided.

Safety parts shall conform to the requirements of para. 7.8.1. Governor ropes, where provided, shall conform to the requirements of para. 7.8.2.

The application and release of safeties shall conform to the requirements of paras. 7.8.3 through 7.8.5.

9 Info ENGINEERING TYPE TESTING AND DESIGN

9.9 Info Engineering Tests



New clause added;

Engineering Tests — Type Testing of Safeties on Inclined Platform Lifts and Inclined Stairway Chairlifts.

Suspend the platform or carriage with the specified load at a height that is more than 15.24 cm (6 in.) from the lower limit of the normal travel. Allow it to drop (freefall) until the platform or carriage and load is stopped by the overspeed Type A, B, or C safety device. The test shall be witnessed by, and the test results certified by, a nationally recognized testing laboratory (NRTL). A minimum of 12 tests shall be conducted equally divided between the following four test types listed below:

9.9.3

(a) test type 1: test using rated load with the lift operating at an angle of 45 deg from the horizontal.

(b) test type 2: test using rated load with the lift operating at an angle of 20 deg or the minimum operating angle as specified by the manufacturer, whichever is greater.

(c) test type 3: test using no load with the lift operating at an angle of 45 deg from the horizontal.

(d) test type 4: test using no load with the lift operating at an angle of 20 deg or the minimum operating angle as specified by the manufacture, whichever is greater.

At the conclusion of the test series, the braking distance for any test shall not exceed 15.24 cm (6 in.) and all support or safety components of the overspeed safety device, rail, and truck shall have performed without structural failure. A test on a given capacity lift shall be acceptable for all similarly designed lifts by the manufacturer for the same or lesser capacity (rated loads).

New section added;

11

MAINTENANCE OF PLATFORM LIFTS AND STAIRWAY CHAIRLIFTS

Operation and maintenance instructions in this Standard are intended for general applications. The equipment manufacturer and/or installer shall be consulted for specific operating or maintenance instructions.

11.1

Written Maintenance Program (WMP/MCP)

11.1.1

A WMP shall be provided by the manufacturer, installer, or firm performing the maintenance of the equipment for lifts covered by sections 2 through 7. Logs for lifts covered by sections 5 through 7 do not need to include a record of weekly operational checks as required by para. 11.2.1(f).

11.1.1.1

Maintenance shall be performed by lift personnel.

11.1.1.2

The WMP shall be available to lift personnel.



11.1.2	<p>The WMP for lifts covered by sections 2 through 4 shall include, but is not limited to, the following:</p> <p>(a) routine maintenance and examinations at scheduled intervals in order to ensure that the installation conforms to the requirements of this Standard</p> <p>(b) a log as required by para. 11.2</p> <p>(c) a procedure for checking the operation of the lift to be conducted not less than weekly by authorized personnel.</p>
11.1.3	The WMP shall be available at the time of the periodic inspection.
11.1.4	The WMP for lifts covered by sections 5 through 7 does not need to include a procedure for weekly operational checks as required by para. 11.1.2(c).
11.2	Log
11.2.1	<p>A log shall be established by the firm performing the maintenance and maintained by lift personnel including, but not limited to, the following:</p> <p>(a) completion date of all maintenance or repair</p> <p>(b) name of person doing the maintenance or repair</p> <p>(c) nature of the maintenance or repair</p> <p>(d) record of all malfunctions</p> <p>(e) record of all accidents occurring on the lift regardless of the nature of the accident</p> <p>(f) a record of the date and time when the operational check as required in (c) was conducted, including the name of the person conducting the check</p> <p>(g) name and telephone number of persons(s) to contact in case of an emergency</p> <p>(h) emergency evacuation procedure</p>
11.2.2	Logs for lifts covered by sections 5 through 7 shall include, but are not limited to, paras. 11.2.1(a) through (e), (g) and (h).
11.2.3	All logs and records required by para. 11.2.1 shall be retained for a minimum of 5 years.
11.3	On-Site Documentation
11.3.1	<p>The on-site documentation shall include, but is not limited to, the following:</p> <p>(a) wiring diagram</p> <p>(b) instruction manual containing procedures for performing required examinations and tests</p> <p>(c) manufacturer's operational instructions that include the operation of the manual lowering device, if provided</p> <p>(d) the log as required by para. 11.2.1</p>

CUSTOMERS PLEASE NOTE: This Table and column "Verdict" can be used in determining how your current or future production is or will be in compliance with new/revised requirements.