

## STANDARD INFORMATION

**Standard Number:** CSA B355  
**Standard Name:** Platform Lifts and Stair Lifts for Barrier-Free Access  
**Standard Edition and Issue Date:** 7<sup>th</sup> Edition Dated February 1, 2019  
**Date of Revision:** February 1, 2019  
**Date of Previous Revision of Standard:** 6<sup>th</sup> Edition Dated March 1, 2015

## EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

**Effective Date:** **July 1, 2020**

## IMPACT, OVERVIEW, AND ACTION REQUIRED

**Impact Statement:** A review of all Listing Reports is necessary to determine which products comply with new/revised 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requests in writing that current requirements be used along with their understanding that their listings will be withdrawn on Effective Date noted above, unless the product is found to comply with new/revised requirements.

### Overview of Changes:

- Revised runway requirements
- Addition of requirements for glass in vision panels
- addition of requirements for testing and certification of interlocks, combination mechanical locks, and electrical contacts
- addition of requirements to address traction drives
- revised requirements for electrical protective devices

Specific details of new/revised requirements are found in table below.

**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:

**Information** – To assist our Engineer with review of your Listing Reports, please submit technical information in response to the new/revised paragraphs noted in the attached or explain why these new/revised 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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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 <del>lined out</del> below.</i>		
5	Info	<b>Runway</b>
5.1	Info	<b>Runway enclosures</b>
<b>General requirements</b>		
The enclosure, where provided, shall be		
5.1.1		a) solid, with smooth interior surfaces <u>i) on all sides of the runway; or</u> ii) only on the access side(s), where the platform enclosure conforms to Clause 7.5.3.2 or 7.7.2; b) so constructed that it will not deflect more than 13 mm when a force of 450 N is applied on any 150 mm × 150 mm area; c) so constructed that no part of the upper edge of the runway enclosure is lower than the corresponding and adjacent upper edge of the platform enclosure when the platform is at any position in its travel; and d) in accordance with applicable building codes. Note: Building codes include applicable requirements for fire rating.
<b>Enclosed vertical platform lifts</b>		
5.1.2		Each enclosed vertical platform lift shall have an enclosed runway <u>a) with a minimum height of 1070 mm on all sides (may be reduced to 900 mm in a private residence) above the top landing;</u> b) which conforms to Clause 5.1.1; and <u>c) which is equipped with landing doors or gate conforming to Clause 5.2.</u>
5.1.3	Info	<b>Unenclosed vertical platform lifts</b>
<b><i>New clause added;</i></b>		
<b>Construction</b>		
Each unenclosed vertical platform lift shall meet the following requirements:		
5.1.3.1		a) It shall have a top landing door or gate that meets Clause 5.2 if travel of the lift exceeds 600 mm. b) It shall have a runway wall conforming to Clause 5.1.1 on any access side other than the bottom landing. c) It shall have a platform gate conforming to Clause 5.2 for the bottom landing side of the platform, except for private residence installations conforming to Clause 4.1.3.



CLAUSE	VERDICT	COMMENT
		<p>d) The portions of the outer surfaces of the platform enclosures, including gates, that protrude above the stationary runway enclosures shall be solid, smooth, and conforming to Clause 5.1.1 b) as a minimum, if applicable as specified in Clause 4.1.4.3.</p> <p>e) The bottom edge of the platform and the aprons attached to it shall not travel beyond the corresponding upper edge of the stationary runway enclosure including the levelling zone, if applicable as specified in Clause 4.1.4.3.</p> <p>f) The underside of the platform shall conform to Clause 5.1.3.2.</p>
		<p><b><i>New clause added;</i></b></p> <p>The underside of the platform shall be guarded in accordance with one of the following requirements:</p> <p>a) The underside of the platform shall be equipped with a sensitive surface that, if the platform is obstructed anywhere on its underside in its downward travel, meets the requirements of Clause 7.2.4. The force required to operate the device shall not exceed 70 N.</p> <p>b) The underside of the platform shall be equipped with a bellows or a similar device conforming to the following requirements:</p> <ul style="list-style-type: none"> <li>i) It shall be flush to the perimeter of the platform.</li> <li>ii) When a force of 550 N (125 lbf) is applied on any 100 mm (4 in.) by 100 mm (4 in.) area, there shall be no permanent deformation.</li> <li>iii) Deflection of the bellows due to a force of 330 N (75 lbf) applied on any 100 mm (4 in.) by 100 mm (4 in.) area shall not exceed 75 mm, (3 in.) or the distance to contact an internal moving component other than the bellows support mechanism, whichever is less.</li> <li>iv) Deflection of the bellows shall be measured when the platform is at any point in travel.</li> </ul>
5.1.3.2		
5.2	Info	<b>Landing doors and gates</b>
5.2.1	Info	<b>General</b>
		<b>Strength, vision panel, and fire rating</b>
		Each landing door or gate shall be
5.2.1.1		<p>d) provided with a vision panel, or, in private residence installation, a means of indicating the arrival of the platform, when the door or gate is made of non-transparent material and is over 1070 mm in height, which shall</p> <ul style="list-style-type: none"> <li>i) be not less than 75 mm in width;</li> <li>ii) be glazed with wired safety glass not less than 6 mm thick conforming to CAN/CGSB-12.11, or laminated safety glass <u>conforming to CAN/CGSB-12.1, or plastic safety glazing sheet conforming to CAN/CGSB-12.12;</u></li> <li>iii) be made as high as possible, consistent with the door or gate design; and</li> <li>iv) have its bottom located not more than 900 mm above the floor level;</li> </ul>



CLAUSE	VERDICT	COMMENT
		<b><i>New clause added;</i></b>
		<b>Glass or Glazing</b>
		Glass or glazing provided in runway door or gate shall meet the following requirements:
5.2.1.2		<ul style="list-style-type: none"> <li>a) It shall be constructed of laminated safety glass conforming to CAN/CGSB-12.1, or plastic safety glazing sheet conforming to CAN/CGSB-12.12.</li> <li>b) It shall make up not less than 60% of the total visible door panel surface area as seen from the landing side of the doors.</li> <li>c) A non-glass edge shall be provided on the leading edge of the door panel.</li> <li>d) Each separate piece of glass shall be marked as specified in the applicable Standard, and the marking shall remain visible after installation.</li> </ul>
5.2.4	Info	<b>Testing and certification of interlocks, combination mechanical locks, and electrical contacts</b>
5.2.4.1	Info	<b>General</b>
5.2.4.1.1		Each type and make of landing and platform door or gate interlock (see Clause 5.2.3) and combination mechanical lock and electrical contact (see Clause 7.7.7) that is required in Clauses 5.2.1.1 c) and 7.7.3 shall be marked and type tested in accordance with Clauses 5.2.4.1.2 to 5.2.5.10 and <u>certified as conforming to the requirements of Clause 5.2.3 or 7.7.7 by an accredited testing laboratory.</u>
		The following marking requirements shall apply:
5.2.4.1.2		<ul style="list-style-type: none"> <li>a) Certified devices shall be suitably and plainly marked for identification. Only devices that conform to the requirements of Clause 5.2.3 or 7.7.7 shall be marked.</li> <li>b) The markings shall be permanent and so placed as to be readily visible when the devices are mounted in position.</li> <li>c) Markings shall include the <ul style="list-style-type: none"> <li>i) manufacturer's name or trademark;</li> <li>ii) type or style (letter or number);</li> <li>iii) rated voltage and current (ac or dc);</li> <li>iv) rated test force (see Clause 5.2.5.8);</li> <li>v) rated test movement (see Clause 5.2.5.8);</li> <li>vi) date (month and year) of certification testing;</li> <li>vii) edition of CSA B355 to which the devices were certified;</li> <li>viii) <u>correct orientation of an interlock, if compliance with Clause 5.2.3.2 depends on the installation orientation of an interlock; and</u></li> <li>ix) <u>mark of a certifying organization accredited by Standards Council of Canada.</u></li> </ul> </li> </ul>
6	Info	<b>Drive unit</b>
6.1	Info	<b>Requirements for all drive units</b>
6.1.2	Info	<b>Power transmission</b>



CLAUSE	VERDICT	COMMENT
		<b><i>New section added;</i></b>
6.1.2.5		<p><b>Factors of safety based on alternating or reversing stresses</b></p> <p>This section contains requirements for alternating or reversing stresses (see standard for details).</p>
		<b><i>New section added;</i></b>
6.1.2.6		<p><b>Fasteners transmitting load</b></p> <p>This section contains requirements for rigid connections, flexible connections, and shaft fillets and keys (see standard for details).</p>
6.2	Info	<p><b>Suspension wire rope, winding drums, sheaves, protection and guarding, and traction</b></p>
		<b><i>New section added;</i></b>
6.2.5		<p><b>Traction</b></p> <p>This section contains requirements for traction (see standard for details).</p>
		<b><i>New section added;</i></b>
6.9		<p><b>Counterweights</b></p> <p>This section contains requirements for counterweights (see standard for details).</p>
7	Info	<b>Carriage</b>
7.2	Info	<b>Requirements for all carriages</b>
7.2.1	Info	<b>Construction</b>
		<b><i>New clause added;</i></b>
		Where enclosures include panels of glass or glazing, the panels shall be
7.2.1.3		<p>a) constructed of laminated safety glass conforming to CAN/CGSB-12.1, or plastic safety glazing sheet conforming to CAN/CGSB-12.12;</p> <p>b) provided with a handrail or framing where wall panels are wider than 300 mm (12 in.); and</p> <p>c) marked on each separate piece as specified in the applicable glass or glazing Standard. The marking shall remain visible after installation.</p>
		<b><i>New section added;</i></b>
7.2.7		<p><b>Ascending car overspeed protection</b></p> <p>This section contains requirements for overspeed protection (see standard for details).</p>



CLAUSE	VERDICT	COMMENT
7.6	Info	<b>Wheelchair platform</b>
7.6.2	Info	<b>Guard (enclosure)</b>
		<b>Unenclosed stair platform lift</b>
		Where a wheelchair platform is installed on an unenclosed stair platform lift, the platform shall
		<u>c) have retractable passenger restraining arms, and the following requirements shall be met:</u>
		<u>i) The arms shall be located above the perimeter of the platform floor at not less than 800 mm and not more than 1000 mm above it. Gaps between the adjacent ends of arm sections shall not exceed 100 mm when the arms are in their guarding positions.</u>
		<u>ii) The arms shall be of smooth construction with all edges rounded. They shall not be permanently deformed when a force of 300 N is applied on any point along the length of the arms in any direction. In addition, they shall not be permanently deformed when a force of 1000 N is applied in the horizontal direction along the centreline of the platform.</u>
7.6.2.1		<u>iii) The arms shall be provided in independent sections. At landings, the retractable ramp and arm at the boarding end of the platform shall be operable only when the arm at the non-boarding end of the platform is in its locked guarding position.</u>
		<u>iv) Each retractable arm shall be mechanically locked and monitored by an electric contact, which shall stop the movement of the platform within 50 mm of travel away from any landing if the arm is not in its locked guarding position. Means shall be provided to manually unlock the retractable arms for emergency evacuation purposes. The unlocking mechanism shall not be readily accessible to the passenger.</u>
		<u>v) Where the retractable arms are power operated, control shall be by means of a continuous- pressure device. The closing speed shall not exceed 0.3 m/s as measured at the fastest point. The force necessary to prevent closing of power-operated arms shall not exceed 140 N as measured from rest at the midpoint across the arm at the boarding end of the platform. The arms may operate in the direction away from an obstruction.</u>
		<u>vi) Means shall be provided to manually fold the platform and passenger restraining arms. The platform and passenger restraining arms shall remain in the folded position after being manually folded.</u>
		<u>vii) Retractable ramps serving any upper landing shall be operable only when the passenger restraining arm at the non-boarding end of the platform is in its locked guarding position.</u>
8	Info	<b>Electrical equipment</b>
8.5	Info	<b>Electrical protective devices</b>
8.5.2	Info	<b>Emergency stop device</b>



CLAUSE	VERDICT	COMMENT
		<p><b>Stop device requirements</b></p> <p>Where required by Clauses 7.3.2 b), 8.5.2.2, 8.5.2.3, 8.5.9, and 8.5.10, the stop device shall</p> <p>a) be red in colour;</p> <p>b) be marked STOP or with an equivalent symbol;</p> <p>c) be a <u>mushroom head</u>, push-to-stop device and have the stop position clearly marked;</p> <p>d) be maintained in either position, except for those devices required in Clause 8.5.2.2 or 8.5.2.3, which may be of a constant-pressure type;</p> <p>e) cause the power to be removed from the drive unit when in the stop position; and</p> <p>f) be <u>unguarded</u></p>
8.5.2.1		
8.5.3	Info	<p><b>Final terminal-stopping switches</b></p> <p>To isolate the motor, brake, and controller from the power supply in the event of travel of the carriage beyond its normal terminal stopping position (see Clause 8.4.4), a final terminal switch or a similar stopping device directly operated by the movement of the carriage shall be provided at each end of the travel, except that <u>A final terminal-stopping switch shall cause the power to be removed from the drive unit and shall be provided at each end of the travel, except that</u></p> <p>a) the lower final terminal-stopping switch need not be provided where a slack-chain or slack-belt switch (see Clause 8.5.5) comes into operation and stops the carriage within 40 mm of the normal terminal landing stopping device; and</p> <p>b) the final terminal-stopping switches may be omitted where no hazard or undue wear is caused by continued operation of the drive unit when the carriage is stopped by a mechanical limit (see Clause 5.3.1).</p> <p>If a final terminal switch has been operated, it shall not be possible to restart the machine until the carriage has been correctly repositioned manually and the final terminal switch reset.</p> <p><u>A final terminal-stopping switch shall be engaged by direct movement of the carriage. It shall not be possible to restart the machine until the carriage has been correctly repositioned manually.</u></p>
8.5.3.1		
8.5.3.2		
		<p><b>Sensitive edge and sensitive surface switches</b></p> <p>Activation of a sensitive edge or sensitive surface by an obstruction (see Clause 7.2.4) shall cause the power supply to the motor to be interrupted and prevent the motor from producing any movement of the carriage towards the obstruction. It shall be possible to drive the carriage away from the obstruction.</p> <p><u>Operation of a sensitive edge or sensitive surface (see Clause 7.2.4) shall cause the power to be removed from the drive unit to prevent any further movement of the carriage in that direction. Normal operation of the carriage in the opposite direction shall be provided.</u></p>
8.5.4		



CLAUSE	VERDICT	COMMENT
9	Info	<b>Data plate and signs</b>
		<b>Data plate</b>
		A data plate shall be fastened at the drive unit, stating the
9.1		a) names of the manufacturer and installer; b) dates of manufacture and installation; c) rated speed; d) size and type of suspension means; e) rated load (see Table 1); f) maximum system pressure; and g) <u>type of use (indoor or outdoor installation), as applicable.</u>
<b>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.</b>		