

Code Rule 32 and the Adoption of the B 77 standard
ANSI B77 Section 1 is not adopted and is excluded in its entirety. See General Provisions of CR32

Please note that the following ANSI B77 2006 sections are to be modified as indicated.

Code Number	Remove	Replace	Add
ANSI B77, Section			
2.1.1.6.2	should	shall	
2.1.1.11.1	qualified personnel	the Commissioner	
2.1.1.11.2			The Commissioner shall be advised by the Owner 10 days prior to the date of the test.
			done in the presence of the Commissioner
2.1.2.6	monthly	weekly	
2.1.2.8.1	should	shall	
2.2.1.2			No aerial lift shall pass under any transmission lines operating at a potential exceeding 50 volts.
2.2.1.6.3	should	shall	
2.3.2.5.7	A plan for evacuation of passengers from each aerial tramway shall be developed and documented.	The owner of each aerial tramway shall submit to the Commissioner a detailed written plan for evacuation of passengers from cabins or carriers in the event of a power failure or breakdown. The procedures set forth in the evacuation plan shall be tested, at any location on the lift, in the presence of the Commissioner at his request. The Commissioner, when satisfied with the evacuation plan and the results of the test, shall notify the owner in writing of such acceptance. A copy of the accepted plan shall be kept on the premises and shall be readily available to the Commissioner's representative.	written; but not limited to:
2.3.2.5.7 (d)			and any conditions which might cause the time to exceed 2 hours after the lift stoppage:

2.3.2.5.7 (l)			available for review by the Commissioner.
	4000	5000	
	17.8	22.3	
2.3.2.5.9 (f)			f) When a required aerial lift control circuit is bypassed, all passengers shall be off loaded and no passengers other than maintenance personnel being transported to the repair site shall be allowed to board the lift until the malfunction is corrected.
3.1.1.6.2	should	shall	
3.1.1.7			On lifts installed prior to 1995, radiophones or suitable public address systems may be used.
3.1.1.9.1.1	should	shall	
3.1.1.10	common passenger types	all passengers	
3.1.1.11.1	tramway	lift	
	qualified personnel	the Commissioner	
3.1.1.11.2	tramway	lift	The Commissioner shall be advised by the Owner 10 days prior to the date of the test.
			done in the presence of the Commissioner
3.1.2.1	EXCEPTION - An aerial lift may continue loading passengers if the following requirements are met: a) The power unit in use meets the requirements of a prime mover (see 3.1.2.1.1); b) Evacuation gear and personnel shall be immediately available in sufficient number and quantity to evacuate the entire aerial lift in a period specified in the evacuation plan (see 3.3.2.5.7).		
3.1.2.6	monthly	weekly	
3.1.2.8.1	should	shall	
3.1.4.4.2	shall	should	
3.1.4.4.4	For aerial lifts operating primarily for foot passengers, each chair	Each chair shall be equipped with a restraining device referred to as a	

3.1.4.4.4 con't	shall be equipped with a restraining device that will not open under forward pressure.	restraint bar that will not open under forward pressure.	
3.2.1	the requirements of; standard	Part	(a) Electrical system acceptance test. Upon the completion of the acceptance test and before public operation of the aerial lift, the design and function of software and/or replay logic shall be certified by the Qualified Engineer of record and the certification shall be included in the acceptance test report. Any modifications made to the electrical design shall be clearly marked on the on-site documentation and signed by a Qualified Engineer. (see also section 32-3.12)
			(b) Software security. The "as built" documents shall include a procedure, developed by the lift manufacturer or Qualified Engineer, to ensure the security of the software logic and operating parameters that will control the aerial lift. Upon completion of the acceptance testing, this procedure shall be implemented in a manner that will prevent unauthorized personnel from making changes to the logic or operating parameters. All programmable logic and parameters shall be documented.
3.2.1.6.3	should	shall	
3.3.2.5.7 3.3.2.5.7 con't	A plan for evacuation of passengers from each aerial lift shall be developed and documented. The plan shall included:	The owner of each aerial lift shall submit to the Commissioner a detailed written plan for evacuation of passengers from cabins or carriers in the event of a power failure or breakdown. The procedures set forth in the evacuation plan shall be tested, at any location on the lift, in the presence of the Commissioner at his request. The Commissioner, when	

		satisfied with the evacuation plan and the results of the test, shall notify the owner in writing of such acceptance. A copy of the accepted plan shall be kept on the premises and shall be readily available to the Commissioner's representative. The written plan shall include, but not limited to:	
3.3.2.5.7 (d)	an estimate of the time necessary for the total evacuation of each aerial lift;	a statement that sufficient number of experienced evacuation personnel will be readily available to evacuate the entire lift within 2 hours of the lift stoppage and any conditions which might cause this time to be exceeded:	
3.3.2.5.7 (l)			available for review by the Commissioner.
3.3.2.5.7(m)			m) a special separate written evacuation plan shall be provided when the aerial lift is used primarily for foot passengers such as for sight- seeing or amusement rides. This plan shall include a specific outline for the evacuation of the very old and/or very young, including babes in arms.
3.3.2.5.7	4000 pounds	5000 pounds	
	17.8 kilonewtons	22.3 kilonewtons	
3.3.2.5.9(f)			f) When a required aerial lift control circuit is bypassed, all passengers shall be off loaded and no passengers other than maintenance personnel being transported to the repair site shall be allowed to board the lift until the malfunction is corrected.
4.1.1.6.2	should	shall	
4.1.1.7			On lifts installed prior to 1995, radiophones or suitable public address systems may be used.
4.1.1.9.1	should	shall	Elevated loading areas shall be protected on all sides by guardrails, safety net or ramps.
4.1.1.9.2			Elevated loading areas shall be protected

4.1.1.9.2 con't			on all sides by guardrails, safety net or ramps.
4.1.1.10	common passenger types	all passengers	
4.1.1.11.1	qualified personnel	the Commissioner	
4.1.1.11.2			The Commissioner shall be advised by the Owner 10 days prior to the date of the test.
			done in the presence of the Commissioner
4.1.2.1	EXCEPTION - An aerial lift may continue loading passengers if the following requirements are met: a) The power unit in use meets the requirements of a prime mover (see 3.1.2.1.1); b) Evacuation gear and personnel shall be immediately available in sufficient number and quantity to evacuate the entire aerial lift in a period specified in the evacuation plan (see 3.3.2.5.7).		
4.1.2.6			Exception: A drive train backstop is only required of lifts installed after 1995, existing lifts with drive train backstops shall comply with section 4.1.2.6.4.
4.1.2.6.2			The controls for the brake shall not be located in a position that would require the operator or attendant to pass through the path of moving carriers in order to operate the controls. Controls shall not be more than 6 feet from the normal operating position of the operator.
4.1.2.6.4 D			d) all backstops installed after 1995 shall be capable of being disengaged.
4.1.2.8.1	should	shall	
4.1.2.8.2			on lifts installed after 1995
4.1.2.9.3	2	1	
4.1.4.4.2	it is recommended		
	should	shall	
4.1.4.5.4	should	shall	

4.1.4.5.4 con't	For aerial lifts operating primarily for foot passengers, each chair shall be equipped with a restraining device that will not open under forward pressure.	Each chair shall be equipped with a restraining device referred to as a restraint bar that will not open under forward pressure.	
4.2.1.2			No aerial lift shall pass under any transmission line operating at a potential exceeding 50 volts.
4.2.13.3 (a)			a) Approval of a Qualified Engineer is not required for lights installed on towers prior to 1995, and is in compliance with AV-39.
4.3.1.2			The requirements of Annex D shall only be required for lifts installed after the effective date of this standard. Lifts installed prior to the effective date of this standard may comply with Annex D of this standard or with the signage requirement of the 2003 edition of Code Rule 32-4.53.
4.3.2.1.2			Operators shall be at least 18 years of age.
4.3.2.5.7	A plan for evacuation of passengers from each aerial lift shall be developed and documented.	The owner of each aerial lift shall submit to the Commissioner a detailed written plan for evacuation of passengers from cabins or carriers in the event of a power failure or breakdown. The procedures set forth in the evacuation plan shall be tested, at any location on the lift, in the presence of the Commissioner at his request. The Commissioner, when satisfied with the evacuation plan and the results of the test, shall notify the owner in writing of such acceptance. A copy of the accepted plan shall be kept on the premises and shall be readily available to the Commissioner's representative.	

4.3.2.5.7 (d)	an estimate of the time necessary for the total evacuation of each aerial lift;	d) a statement that sufficient number of experienced evacuation personnel will be readily available to evacuate the entire lift within 2 hours of the lift stoppage and any conditions which might cause this time to be exceeded:	
4.3.2.5.7 (l)			available for review by the Commissioner.
4.3.2.5.7 (m)			m) A special separate written evacuation plan shall be provided when the aerial lift is used primarily for foot passengers such as for sight seeing or amusement rides. This plan shall include a specific outline for the evacuation of the very old and/or very young, including babes in arms.
4.3.2.5.7	4000 pounds	5000 pounds	
	17.8 kilonewtons	22.3 kilonewtons	
4.3.2.5.9 (f)			f) When a required aerial lift control circuit is bypassed, all passengers shall be off loaded and no passengers other than maintenance personnel being transported to the repair site shall be allowed to board the lift until the malfunction is corrected.
4.3.3.3	24	12	
	should	shall	
	should	shall	
5.1.1.6.2	should	shall	
5.1.1.7			On lifts installed prior to 1995, radiophones or suitable public address systems may be used.
5.1.1.9.1	should	shall	
5.1.1.11.1	qualified personnel	the Commissioner	
5.1.1.11.2			a surface lift
			The Commissioner shall be advised by the Owner 10 days prior to the date of the test.
5.1.2.8.1	should	shall	

5.1.3.3.4	should	shall	
5.1.4.3.2	should	shall	
5.1.4.3.3.(d)	should	shall	
5.1.4.4.4	should	shall	
5.3.1.2			The requirements of Annex D shall only be required for lifts installed after the effective date of this standard. Lifts installed prior to the effective date of this standard may comply with Annex D of this standard or with the signage requirement of the 2003 edition of Code Rule 32-5.53.
5.3.2.2 (e)	e) Surface lifts provided with television surveillance of sections of the tow path and designated unloading stations not visible to the operator do not require an unloading attendant, provided conditions (3) through (6) are enforced and the unloading areas of the surface lift meet the requirements of 5.1.1.9. ; NOTE – When specifically approved, platter lifts with single passenger hangers do not require either an unloading attendant or television surveillance providing conditions (3) through (6) are enforced and the unloading area of the platter lift meets all manufacturer’s design specifications.		
5.3.2.5.9 (f)			f) When a required surface lift control circuit is bypassed, all passengers shall be off loaded and no passengers other than maintenance personnel being transported to the repair site shall be allowed to board the lift until the malfunction is corrected.
5.3.3.3.1	should	shall	
	should	shall	

6.1.1.6.2	should	shall	
6.1.1.7			On lifts installed prior to 1995, radiophones or suitable public address systems may be used.
6.1.1.9.2	should	shall	
6.1.1.11.1	qualified personnel	the Commissioner	
6.1.1.11.2			The Commissioner shall be advised by the Owner 10 days prior to the date of the test.
6.1.2.8.1	should	shall	
6.1.4.3	should	shall	
6.2.1.2			No aerial lift shall pass under any transmission line operating at a potential exceeding 50 volts.
6.3.1.2			The requirements of Annex D shall only be required for lifts installed after the effective date of this standard. Lifts installed prior to the effective date of this standard may comply with Annex D of this standard or with the signage requirement of the 2003 edition of Code Rule 32-6.53.
6.3.3.3	should	shall	
7.1.1.3.1			In no case shall the conveyor belt grade exceed 40 percent.
7.1.1.6			A minimum live load of 100 lbs/ft ² (488 kg.m ²) shall be used.
7.1.1.6.2	should	shall	
7.1.1.11.1	qualified personnel	the Commissioner	
7.1.1.11.2			The Commissioner shall be advised by the Owner 10 days prior to the date of the test.
7.2.1.2			No conveyor shall pass under any transmission line operating at a potential exceeding 50 volts.