

(1) Malfunction Reporting

(A) The owner of a passenger ropeway that experiences an evacuation, de-ropement, an unseated passenger which is not a direct result of loading the ropeway or the use of an auxiliary power unit (APU) to unload passengers other than a power failure of the primary mover shall be reported to the department within 2 business days.

Reference
Code of Colorado Regulations
Passenger Tramway Safety Board
3CCR 718-1

[https://www.sos.state.co.us/CCR/GenerateRulePdf.do?ruleVersionId=11036&fileName=3%20CR%20718-](https://www.sos.state.co.us/CCR/GenerateRulePdf.do?ruleVersionId=11036&fileName=3%20CR%20718-1)

Soil Testing

California	Colorado	New Jersey	New York
No references to soil testing found.	<p>21.2.8 Submittal of verification of concrete construction. After the new installation or relocation is completed and before the initial inspection is conducted, and before the acceptance test is observed, the Professional Engineer in responsible charge of the tramway construction shall verify to the Board on the appropriate form that the foundations, soils and concrete test samples have been inspected and completed according to the design, plans and specifications for such work. This document shall be required prior to the acceptance test.</p> <p>...</p> <p>21.3.8 Submittal of verification of concrete construction. After the major modification is completed and before the initial inspection is conducted, and before the acceptance test is observed, the Professional Engineer in responsible charge of the tramway construction shall verify to the Board on the appropriate form that the foundations, soils and concrete test samples have been inspected and completed according to the design, plans and specifications for such work. This document shall be required prior to the acceptance test.</p>	<p>§ 5:12-3.8. Submittal of plans (f) Plans required by (a) above shall include the following information:</p> <p>...</p> <p>2. "... The foundation drawing shall include a description of the soil and allowable soil pressure based on investigation by the professional engineer."</p> <p>...</p> <p>5. A signed and sealed letter or certification from a licensed professional engineer stating that the structure will adequately support the passenger tramway in the proposed location in all design loading conditions.</p>	<p>Title 12, ch. i, subch. a, pt. 32 The following ANSI B77 2006 sections are to be modified as indicated. Text in brackets [] is to be deleted. Underlined text is to be added to the ANSI sections. ANSI B77 Section 1 is not adopted and is excluded in its entirety.</p> <p><i>ANSI B77, Section 2.1.1.6.2 Foundations</i> In determining the resistance of the soil to motion of the foundation, the subsoil conditions at the site shall be considered, including any buoyancy due to groundwater that may be present. If the resistance of the soil is not practically determinable, the foundation or anchorage <u>should</u> shall be designed as a gravity anchor, using a coefficient of friction appropriate to the general character of the soil. Bottoms of foundations shall be below the normal frost depth unless resting on non-frost susceptible soil or solid rock. Foundations on rock shall be firmly anchored to solid rock, unless designed as gravity foundations.</p>

Incident Reporting

California	Colorado (Summary)	New Jersey	New York
<p>§3154. Reporting of Injuries (a) Each owner or operator of a passenger tramway shall report or cause to be reported to the Division each known incident where maintenance, operation, or use of such tramway results in <u>injury to any person unless such injury does not require medical service other than ordinary first aid treatment.</u></p> <p>(b) A report for such an incident shall be made to the Division <u>in writing within five (5) days.</u> In addition, an incident resulting in a fatality or in an injury to five (5) or more persons shall be reported to the Division <u>by telephone within twenty-four (24) hours.</u></p>	<p>During public operation - verbally as soon as reasonably possible but not more than 24 hours, written <u>postmarked</u> within 5 days</p> <p>When not in operation - verbally as soon as reasonably possible but not more than 72 hours, and lift may not re-open until verbal report, written <u>postmarked</u> within 15 days</p> <p>Special additional rules for death or injury from a <u>possible</u> passenger tramway malfunction.</p>	<p>§ 5:12-2.1 "Serious injury" means any injury in which the injured person has lost consciousness, broken a bone, was transported to an emergency medical facility or an injury for which medical treatment by a physician beyond first aid was required.</p> <p>§ 5:12-3.7. Accident, incident or mechanical breakdown reporting (a) No passenger tramway that directly or indirectly results in a death shall be permitted to resume operation until the passenger tramway has passed a full mechanical and safety inspection made by the Bureau of Code Services.</p> <p>(b) <u>All serious injuries or fatalities</u> incurred during the operation of any ski lift shall be <u>immediately reported by telephone</u> at the telephone number provided for this purpose to the Division by the operator. A <u>written incident report</u> shall be prepared and sent to the Department by the operator by facsimile at the</p>	<p>Passenger Tramways General Provisions Section 32.10 - Personal injury report</p> <p>By the close of the first business day following notification that any person may have sustained a serious personal injury connected with the operation or use of a tramway or a part thereof, the owner shall by telephone or otherwise report the same to the commissioner.</p>

		<p>facsimile number provided for this purpose <u>within 24 hours of the incident</u>.</p> <p>(c) Any <u>mechanical malfunction or emergency evacuation of a passenger tramway</u> shall be reported to the Department by the operator <u>immediately by telephone</u> at the numbers provided for this purpose. A <u>written incident report</u> shall be prepared and sent to the Department by the operator <u>by facsimile</u> at a number provided for this purpose <u>within five days</u> of the incident or be mailed to PO Box 808, Trenton, NJ 08625 <u>postmarked within five days</u> of the incident.</p> <p>(d) All pertinent information concerning passenger tramway injuries requiring first aid shall be recorded in a form that is easy to access and read and is readily available for inspection by the Bureau of Code Services.</p>	
	<p>Colorado (full code)</p>		
	<p>1.4 Definitions. Critical components: Critical components are those parts of a tramway or lift system, the failure of which is likely to cause serious injury to the passengers. The list of critical components for a tramway or lift system shall include, but not be limited to the following:</p> <ol style="list-style-type: none"> (1) Carrier, including grip, hanger, chair, or gondola; (2) Haul rope sheaves, sheave units and their attachments; (3) Terminal sheaves and their attachments; (4) Tension systems and their attachments; (5) Wire rope, including haul ropes, track ropes and counterweight ropes. <p>23.1 Definitions. "Reportable passenger Tramway incident" is defined as the following.</p> <p>(a) <u>Any incident from a possible malfunction of a passenger Tramway in which a person is injured or killed. The Tramway shall cease operation as defined by Section 23.3 Limitation of operation. For the purposes of Section 23, the term "injured" is defined as bodily damage requiring immediate medical attention.</u></p> <p>(b) Any incident in which a passenger is injured falling or jumping from a chair which is outside of the load or unload zone. For the purposes of this Rule, the "load zone" is defined as the area from the "wait here" sign to a point where the "no ski closure" ends or in the event there are no ski closures, at a point where the vertical clearance of the lift line is greater than eight feet. This is measured from the bottom of the chair seat of an open carrier to the terrain or snow surface.</p>		

For the purposes of this Rule, the “unload zone” is defined is the area approaching the unload area where the vertical clearance is less than eight feet. This is measured from the bottom of an open carrier to the terrain or snow surface.

(c) Any unintentional deropement of an aerial Tramway regardless of whether or not the Tramway is evacuated. This does not apply to Surface Lifts, Tows and Conveyors.

(d) Any unplanned evacuation other than by prime mover, regardless of cause. This does not apply to Surface Lifts, Tows and Conveyors.

(e) Any fire involving Tramway equipment or structures that poses a risk to passengers, operating personnel or the structural integrity of the Tramway.

(f) Failure of any electrical or mechanical component which results in the loss of control of the Tramway, unless the loss of control is a direct result of the malfunction of a single manual stop or speed control switch. Any of the following five conditions is considered a loss of control:

- (1) Tramway will not slow down when given the command to do so;
- (2) Tramway will not stop when given the command to do so;
- (3) Tramway accelerates faster than normal design acceleration;
- (4) Tramway self starts or self accelerates without the command to do so;
- (5) Tramway reverses direction unintentionally and without the command to do so.

(g) The failure of the following components or their primary connections are reportable: Failure is defined as the inability of the listed components to continue to function as designed and continued operation would represent a hazard.

- (1) Terminal Structure;
- (2) Bullwheel;
- (3) Brake System Components;
- (4) Tower Structure;
- (5) Sheave, Axle or Sheave Assembly;
- (6) Carrier;
- (7) Grip;
- (8) Haul, Track or Counterweight Cable.

23.2 Reporting to the Board

(a) All reportable passenger Tramway incidents occurring during public operation shall be orally

reported to a Board member or the authority appointed by the Board as soon as reasonably possible but no later than twenty-four hours after the time of such incident or within twenty-four hours after the incident becomes known to the area personnel. A written report shall be delivered to the Board on forms approved by the Board postmarked within five days of such incident or postmarked within five days after the incident becomes known to the area personnel.

(b) A reportable incident discovered on dates when the lift is not open to the public shall be orally reported to a Board member or the authority appointed by the Board as soon as reasonably possible, but no later than seventy-two hours after such incident becomes known to the area personnel. A written report shall be delivered to the Board on forms approved by the Board or postmarked within fifteen days following the verbal report. However, all oral reports must be made prior to reopening a lift. Area personnel is defined as personnel involved with the operation, supervision and maintenance of the Tramway. This includes, but is not limited to, lift maintenance, lift operations, ski patrol and all supervisory staff. 23.3 Limitation of Operation. When a death or injury results from a possible malfunction of a passenger Tramway, as defined in Section 23.1 (a), the owner or area personnel of the Tramway shall immediately cease operation and notify the Supervisory Tramway Engineer or a member of the Board by telephone. No part of the Tramway shall be removed or disturbed before permission has been given by a Board member, the Supervisory Tramway Engineer, or his designated representative, except to the extent that such action is necessary to avoid further death or serious injury. An investigation of the occurrence shall then be initiated within twenty-four hours and shall precede any authorization to resume public operation of the Tramway. The report of investigation shall include a factual account of the incident, the nature and extent of injuries to persons, damage to the passenger Tramway, any witness statements, any other pertinent details, and recommendations for remedial measures to be taken prior to resuming operating.

23.6 Logs - Loading, Unloading Incidents and Passengers Falling or Jumping from Lifts

	Area operators shall maintain a log which shall contain reports of all loading and unloading incidents in which injury occurs.		

<p>(a) Each owner or operator of a passenger tramway shall report or cause to be reported to the Division each known incident where maintenance, operation, or use of such tramway results in injury to any person unless such injury does not require medical service other than ordinary first aid treatment.</p> <p>(b) A report for such an incident shall be made to the Division in writing within five (5) days. In addition, an incident resulting in a fatality or in an injury to five (5) or more persons shall be reported to the Division by telephone within twenty-four (24) hours.</p>			