

## **Alberta**

### **Aerial Lift – (Appareil de Levage)**

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## **OCCUPATIONAL HEALTH AND SAFETY CODE 2009**

### **Elevating Platforms and Aerial Devices Worker safety**

346(1) An employer must ensure that a worker is not travelling in a basket, bucket, platform or other elevated or aerial device that is moving on a road or work site if road conditions, traffic, overhead wires, cables or other obstructions create a danger to the worker.

346(2) A person must not travel in a basket, bucket, platform or other elevated or aerial device that is moving on a road or work site if road conditions, traffic, overhead wires, cables or other obstructions create a danger to the person.

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### **Part 6 Cranes, Hoists and Lifting Devices**

#### **General Requirements**

#### **Application**

59(1) This Part applies to lifting devices, including cranes and hoists, with a rated load capacity of 2000 kilograms or more.

59(1.1) This Part does not apply to drawworks on equipment that is subject to Part 37.

59(2) Sections 60 to 74 apply to roofer's hoists regardless of their rated load capacity.

59(2.1) A hoist may only be used for vertical lifting or lowering if it complies with this Part and is designed and manufactured for vertical lifting or lowering.

59(3) Despite subsection (2), sections 63, 64(4) and 65 do not apply to roofer's hoists.

59(4) Despite subsection (1), an employer must ensure that a lifting device with a rated load capacity of less than 2000 kilograms has the rated load capacity of the equipment shown on the equipment.

#### **Not commercially manufactured**

60 If a lifting device is not commercially manufactured, an employer must ensure that it is fit and safe for use as a lifting device and that it is certified by a professional engineer.

### **Identification of components**

61 An employer must ensure that all major structural, mechanical and electrical components of a lifting device are permanently and legibly identified as being component parts of a specific make and model of lifting device.

### **Rated load capacity**

62(1) An employer must ensure that a lifting device has a plate or weatherproof label permanently secured to it that legibly shows  
(a) the manufacturer's rated load capacity,  
(b) the manufacturer's name, and

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(c) the model, serial number and year of manufacture or shipment date.

62(2) If a lifting device is not commercially manufactured, an employer must ensure that it has a plate or weatherproof label permanently secured to it that legibly shows the rated load capacity according to the professional engineer's certification.

62(3) Subsections (1) and (2) do not apply to A frames and gin poles.

### **Load charts**

63(1) An employer must ensure that a mobile crane or boom truck is equipped at all times with load charts showing the rated load capacity of the mobile crane or boom truck at all permitted boom angles and boom radii.

63(2) An employer must ensure that a tower crane has a load chart

(a) conspicuously and permanently secured to the cab, and  
(b) showing the manufacturer's rated capacity loads at various radii of a Two part line and a four part line separately.

### **Operator requirements**

64(1) An employer must ensure that a lifting device is only operated by a competent worker authorized by the employer to operate the equipment.

64(2) At the employer's request, an operator, before operating a lifting device, must be able to demonstrate that the worker is competent in the equipment's operation and knowledgeable about load charts and the code of signals for hoisting operations.

64(3) No worker other than the competent worker authorized by the employer may operate a lifting device.

64(4) Before operating a particular lifting device, the operator must be familiar with all recent entries in its log book.

### **Log books**

65(1) An employer must set up a paper or electronic log book for each lifting device at a work site.

65(1.1) Despite subsection (1), the log book requirement does not apply to manually operated hoists.

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65(2) The employer must ensure that

- (a) the log book is readily available for inspection by an officer at any time,
- (b) the most current log book of a mobile crane accompanies it or is available to the operator at all times, and
- (c) if ownership of a lifting device is transferred to a new owner, the log book is transferred to the new owner.

65(3) The employer must ensure that the following details are entered into the log book:

- (a) the date and time when any work was performed on the lifting device;
- (b) length of time in lifting service
  - (i) recorded as hours of service if the lifting device is equipped by the manufacturer with an hour meter, or
  - (ii) if required by the manufacturer's specifications;
- (c) all defects or deficiencies and when they were detected;
- (d) inspections, including examinations, checks and tests, that are performed, including those specified in the manufacturer's specifications;
- (e) repairs or modifications performed;
- (f) a record of a certification under section 73;
- (g) any matter or incident that may affect the safe operation of the lifting device;
- (h) any other operational information specifically identified by the employer;
- (i) in the case of a tower crane, whether or not the weight testing device was lifted for that working day, before the work of lifting loads began.

65(4) The employer must ensure that each entry in a paper log book is signed by the person doing the work.

65(5) The employer must ensure that each entry in an electronic log book identifies the person doing the work.

65(6) In the case of a tower crane, the employer must ensure that a senior representative of the employer at the work site confirms that the entries in the log book are correct every day that the tower crane is in operation.

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#### **Preventing an unsafe lift**

66 If the operator of a lifting device has any doubts as to the safety of workers in the vicinity of the lift, the operator must not move any equipment or load until the operator is assured that the working conditions are safe.

### **Preventing collisions**

67 An employer must ensure that procedures are developed to prevent collisions if two or more lifting devices are in use and there is the potential for a collision between them, their loads or component parts.

### **Load weight**

68 An employer must ensure that the operator of the lifting device, the rigger supervised by the operator and the person in charge of a lift are provided with all the information necessary to enable them to readily and accurately determine the weight of the load to be lifted.

### **Lift calculation**

68.1 An employer must ensure that a lift calculation is completed for any lift exceeding 75 percent of a crane's rated capacity.

### **Loads over work areas**

69(1) An employer must ensure that work is arranged, if it is reasonably practicable, so that a load does not pass over workers.

69(2) An operator of a lifting device must not pass the load on the device over workers unless

(a) no other practical alternative exists in the circumstances, and

(b) the workers are effectively warned of the danger.

69(3) A worker must not stand or pass under a suspended load unless the worker has been effectively warned of the danger and the operator of the lifting device knows the worker is under the suspended load.

69(4) The operator of a lifting device that is travelling with a load must ensure that the load is positioned as close to the ground or grade as possible.

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### **Tag and hoisting lines**

70(1) If workers are in danger because of the movement of a load being lifted, lowered or moved by a lifting device, an employer must ensure that

(a) a worker uses a tag line of sufficient length to control the load,

(b) the tag line is used in a way that prevents the load from striking the worker controlling the tag line, and

(c) a tag line is used when it allows worker separation from the load.

70(2) An employer must ensure that tag lines of non conductive synthetic rope are used when there is a danger of contact with energized electrical equipment.

70(3) An employer must ensure that tag lines are not used in situations where their use could increase the danger to workers.

## **Hand signals**

71 An employer must ensure that hand signals necessary to ensure a safe hoisting operation are given in accordance with section 191 by a competent signaller designated by the employer.

## **Controls**

72(1) Moved to section 95.1

72(2) Repealed

72(3) The employer must ensure that an operator who uses a remote control to operate a lifting device is visually distinguishable from other workers at the work site.

## **Repairs and modifications**

73(1) An employer must ensure that structural repairs or modifications to components of a lifting device are

- (a) made only under the direction and control of a professional engineer, and
- (b) certified by the professional engineer to confirm that the workmanship and quality of materials used has restored the components to not less than their original capacity.

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73(2) If structural repairs or modifications are made, the employer must ensure that

- (a) the repaired or modified components are individually and uniquely identified in the log book and on the component, and
- (b) the professional engineer's certification makes reference to those components and their identification.

## **Containers for hoisting**

74(1) An employer must ensure that a container used for a load being lifted by a hoist is designed for that particular purpose and bears a marking to indicate its maximum load rating.

74(2) A person must not use an oil drum or similar container as a container for a load being lifted by a hoist unless the drum or container is hoisted in a cage designed for that purpose.

## **A-Frames and gin poles**

75 An employer must ensure that an A frame or gin pole

- (a) is not inclined more than 45 degrees from the vertical,
- (b) is equipped with a boom stop, and
- (c) has the sheave and cap of its rigging attached securely enough to the gin pole to withstand any loads to which the assembly may be subjected.

### **Suspended personnel baskets**

75.1(1) An employer must ensure that

(a) a commercially manufactured suspended personnel basket is erected, used, operated and maintained in accordance with the manufacturer's specifications or specifications certified by a professional engineer, or

(b) a suspended personnel basket that is not commercially manufactured is designed and certified by a professional engineer.

75.1(2) Despite section 147, if it is not practicable to provide a separate personal fall arrest system using a vertical lifeline for each worker in the man basket, an employer must ensure that

(a) a separate support is attached between the suspended personnel basket and the hoist line above the hook assembly that is capable of withstanding the weight of the person basket, materials, equipment and workers should the hook assembly fail, and

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(b) each worker within the personnel basket is wearing a separate personal fall arrest system attached to the personnel basket.

### **Standards**

347(1) An employer must ensure that a self propelled work platform manufactured on or after July 1, 2009 with a boom supported elevating platform that telescopes, articulates, rotates or extends beyond the base dimensions of the platform meets the requirements of

(a) CSA Standard CAN/CSA B354.402, Self Propelled Boom Supported Elevating Work Platforms, or

(b) ANSI Standard ANSI/SIA A92.5 2006, Boom Supported Elevating Work Platforms.

347(2) Subsection (1) does not apply to a work platform mounted on a motor vehicle.

347(3) An employer must ensure that a self propelled integral chassis elevating work platform manufactured on or after July 1, 2009 with a platform that cannot be positioned laterally completely beyond the base and with its primary functions controlled from the platform meets the requirements of

(a) CSA Standard CAN/CSA B354.2 01 (R2006), Self Propelled Elevating Work Platforms, or

(b) ANSI Standard ANSI/SIA A92.6 2006, Self Propelled Elevating Work Platforms.

347(4) An employer must ensure that a manually propelled, integral chassis elevating work platform manufactured on or after July 1, 2009 with a platform that cannot be positioned laterally completely beyond the base, that may be adjusted manually or using power and that must not be occupied when moved horizontally meets the requirements of

(a) CSA Standard CAN3 B354.1 04, Portable elevating work platforms, or

(b) ANSI Standard ANSI/SIA A92.3 2006, Manually Propelled Elevating Aerial Platforms.

347(5) An employer must ensure that a telescopic aerial device, aerial ladder, articulating aerial device, vertical tower, material lifting aerial device or a combination of any of them, when mounted on a motor vehicle, whether operated manually or using power, meets the requirements of CSA Standard CAN/CSA C225 00 (R2005), Vehicle Mounted Aerial Devices.

347(6) An employer must ensure that a mast climbing elevating work platform that may be adjusted manually or using power meets the requirements of ANSI Standard ANSI/SIA A92.9 1993, Mast Climbing Work Platforms.

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347(7) An employer must ensure that a vehicle mounted bridge inspection and maintenance elevating work platform meets the requirements of ANSI Standard ANSI/SIA A92.8 1993 (R1998), Vehicle Mounted Bridge Inspection and Maintenance Devices.

347(8) An employer must ensure that an order picker meets the requirements of ASME Standard B56.12000, Safety Standard for Low Lift and High Lift Trucks.

347(9) An elevating work platform of a type not referred to in subsections (1) to (8) must meet a standard the use of which is approved by a Director of Inspection.

### **Permanent suspension powered work platforms**

348(1) An employer must ensure that the platform of a permanent suspension powered work platform

(a) is constructed, installed, operated, tested, inspected, maintained, altered and repaired in accordance with CSA Standard CAN/CSAZ271 98 (R2004), Safety Code for Suspended Elevating Platforms, or

(b) if it was installed before April 30, 2004, is certified by a professional engineer.

348(2) For the purposes of subsection (1), the "rated capacity" in CSA Standard CAN/CSA Z27198 (R2004) is to be taken to mean the total weight of

(a) workers and hand tools, with a minimum aggregate weight of 115 kilograms per worker, and

(b) water and other equipment that the work platform is designed to lift at the rated speed.