

PART 13: LADDERS, SCAFFOLDS AND TEMPORARY WORK PLATFORMS

DIVISION 5 – MOVABLE WORK PLATFORMS

Work platforms on wheels

13.24

- (1) ~~A movable work platform with a worker on it must not be transported along the ground unless~~
- ~~(a) only minor repositioning of the movable work platform is effected,~~
 - ~~(b) the platform is a self-propelled elevating work platform and is designed to be moved with the platform elevated,~~
 - ~~(c) a rolling scaffold that has a height of less than 1½ times the minimum base dimension is moved by a worker on the platform, or~~
 - ~~(d) a rolling scaffold that has a height of less than 2 times the minimum base dimension is moved by a worker on the ground.~~

If a moveable work platform on wheels is not designed for or intended to be moved along the floor or other supporting surface while a person is occupying the platform, the platform must be secured to prevent that movement before a person accesses or occupies the platform.

- (2) ~~The carrier vehicle or wheels of a movable work platform must be secured against inadvertent movement before a worker occupies the platform.~~

If a moveable work platform is designed for and intended to be moved along the floor or other supporting surface while a person is occupying the platform, the platform must be moved only in the manner and under the conditions specified by the platform's manufacturer.

- (3) **Despite subsection (2), if the height of the work platform of a rolling scaffold that is occupied by a person is**
- (a) not more than one and one half times the least base dimension of the scaffold, the scaffold may be moved by the effort of the person occupying the platform or by the effort of a person on the floor or other supporting surface,**
 - (b) more than one and one half times the least base dimension of the scaffold, the scaffold must be moved only by the effort of a person on the floor or other supporting surface, and**
 - (c) more than two times the least base dimension of the scaffold, the scaffold must not be moved while the person is occupying the platform.**

Explanatory Note

This section is proposed for amendment because existing section 13.24 (1) (b) restricts mobile operation of elevating work platforms to those that are self-propelled and designed to be moved with the platform elevated. Self-propelled in the context of this section means the platform occupant can move the platform along the floor or other supporting surface by activating a control at the platform level to engage a drive motor or engine that is integral to the machine. There are some elevating work platforms that are not self-propelled but are designed to allow for the equipment to be moved along the floor or supporting surface with the platform elevated. Such a platform normally requires one or more persons at the base of the machine to move the machine

**AMENDMENTS FOR PART 13: LADDERS, SCAFFOLDS AND TEMPORARY WORK PLATFORMS
IN THE OCCUPATIONAL HEALTH AND SAFETY REGULATION**

and platform. Use of such non self-propelled devices in the manner for which they were designed now requires a variance.

The requirement in existing section 13.24 (2) renders existing section 13.24 (1) redundant, and that is not the intent of this section. Thus the proposed amendment is a complete rearrangement and rewriting of section 13.24.

Proposed new section 13.24 (1) is intended to provide that a work platform that is not designed to be moved across a floor or other supporting surface with a person on the platform is secured to prevent such movement before the platform is occupied. It also provides that if a work platform is designed to be moved with a person on the platform but it is not intended to be moved across the floor or other supporting surface for a particular task, it must be secured to prevent such movement before the platform is occupied.

Proposed new section 13.24 (2) is intended to provide that if a platform is designed to be moved with a person on the platform and it is planned or intended to move the platform while a person is on the platform, the platform must be moved only in the manner and under the conditions specified by the manufacturer of the platform.

Proposed section 13.24 (3) sets limits for when a rolling scaffold may be moved while the platform is occupied by a person. Note a rolling scaffold is typically built using scaffold frames or tube and clamp scaffold components, has a work platform at a fixed height, and is normally moved across the floor or other supporting surface by the manual effort of one or more persons.

Proposed section 13.24 (3) (c) prohibits the movement of a rolling scaffold while the platform is occupied if the platform height is greater than two times the least base dimension.

AMENDMENTS FOR PART 13: LADDERS, SCAFFOLDS AND TEMPORARY WORK PLATFORMS
IN THE *OCCUPATIONAL HEALTH AND SAFETY REGULATION*

- Lift truck (forklift) mounted work platforms** **13.30** (1) A work platform supported by ~~the forks of a lift truck~~ may be used to support ~~workers~~ **people only if other conventional means of access for the task, such as ladders, scaffolds and elevating work platforms, are not practicable** ~~only for infrequent, short-duration work.~~
- (2) ~~If a worker is elevated on a work platform supported by a lift truck, the operator must remain at the controls of the truck.~~ **A work platform supported by a lift truck must be designed and used in accordance with *WorkSafeBC Standard 13.30 Work Platforms supported by Lift Trucks*.**
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Explanatory Note

This proposed amendment is to address concerns raised primarily by the construction industry about the restriction on the use of a lift truck-mounted work platform to only infrequent, short duration work. A common practice in construction is to use a work platform supported by a lift truck to install building components, such as large window units, when the weight of the building component plus the people needed to handle it exceeds the maximum rated load of the elevating work platforms normally employed to position people at height to do work tasks. A number of construction sector employers have been granted a variance to permit this activity.

The current wording of section 13.30(1) appears to be too restrictive for some industry sectors. The proposed amendment will broaden the circumstances where a work platform supported by a lift truck can be used, and generally avoid the need for variance orders to be considered. The proposed language is similar to that used in the *Occupational Health and Safety Regulation* (“OHSR”) prior to amendments to Part 13 that came into force in January 1, 2005. The employer would still be obligated to use a lift truck-mounted work platform only when other equipment designed specifically to position people to do tasks at height is either not reasonably available due to the infrequent or emergent nature of a short duration task, or not suitable due to the reach and lifting capacity needed for the task.

The CSA and ANSI standards adopted by the *OHSR* as requirements for lift trucks recognize and allow for the use of work platforms supported by lift trucks, and provide criteria for the design and use of such platforms. These standards do not place a restriction on use based on the frequency of use or the duration of the task. Since some of the criteria for design and use vary between the standards, it is proposed that a new *WorkSafeBC Standard* be published to establish criteria and provide ready access to the requirements for the design and use of such platforms. A draft of the proposed standard is provided at the end of this package of materials for review and comment.

**AMENDMENTS FOR PART 13: LADDERS, SCAFFOLDS AND TEMPORARY WORK PLATFORMS
IN THE OCCUPATIONAL HEALTH AND SAFETY REGULATION**

- Fall protection** **13.33** (1) A ~~person-worker~~ on an elevating work platform must wear a personal fall arrest system secured to a suitable and substantial anchorage point.
- (1.1) Despite subsection (1), a ~~person worker~~ on a scissor lift, or on an elevating work platform with similar characteristics to a scissor lift, that is on a firm level surface with no irregularities to cause platform instability, is exempt from wearing a personal fall arrest system, provided that all manufacturer's guardrails and chains are in place.
- (2) If a ~~person-worker~~ is supported on a work platform suspended by fewer than four suspension lines, the ~~person-worker~~ must use a personal fall arrest system secured to an anchor meeting the requirements of Part 11 (Fall Protection) and independent of the work platform and its suspension system.
- (3) If a ~~person-worker~~ is supported on a work platform suspended by four or more suspension lines, the ~~person-worker~~ must use a personal fall arrest system secured to an anchor on the platform or to an anchor meeting the requirements of Part 11 (Fall Protection) and independent of the work platform and its suspension system.
- (3.1) Despite subsection (3), a person is not required to use a personal fall protection system on an outrigger or suspended mason's scaffold with guardrails on the open sides.**
- (4) Each person on a work platform suspended from a crane or hoist must use a personal fall arrest system with a shock absorbing lanyard, secured to
- (a) an anchor above the load hook, or
- (b) an anchor attached to the platform and designated for that purpose by the manufacturer or a professional engineer, provided that the platform has a safety strap that will prevent the platform from falling more than 15 cm (6 in) if the platform becomes dislodged from the hook.
- (5) Each person on a work platform attached to a crane boom must use a personal fall arrest system secured to an anchor on the boom or on the platform.
- (6) The personal fall arrest system referred to in subsection (5) must be secured on the boom or on the platform to an anchor that is designated by
- (a) the manufacturer, or
- (b) a professional engineer.

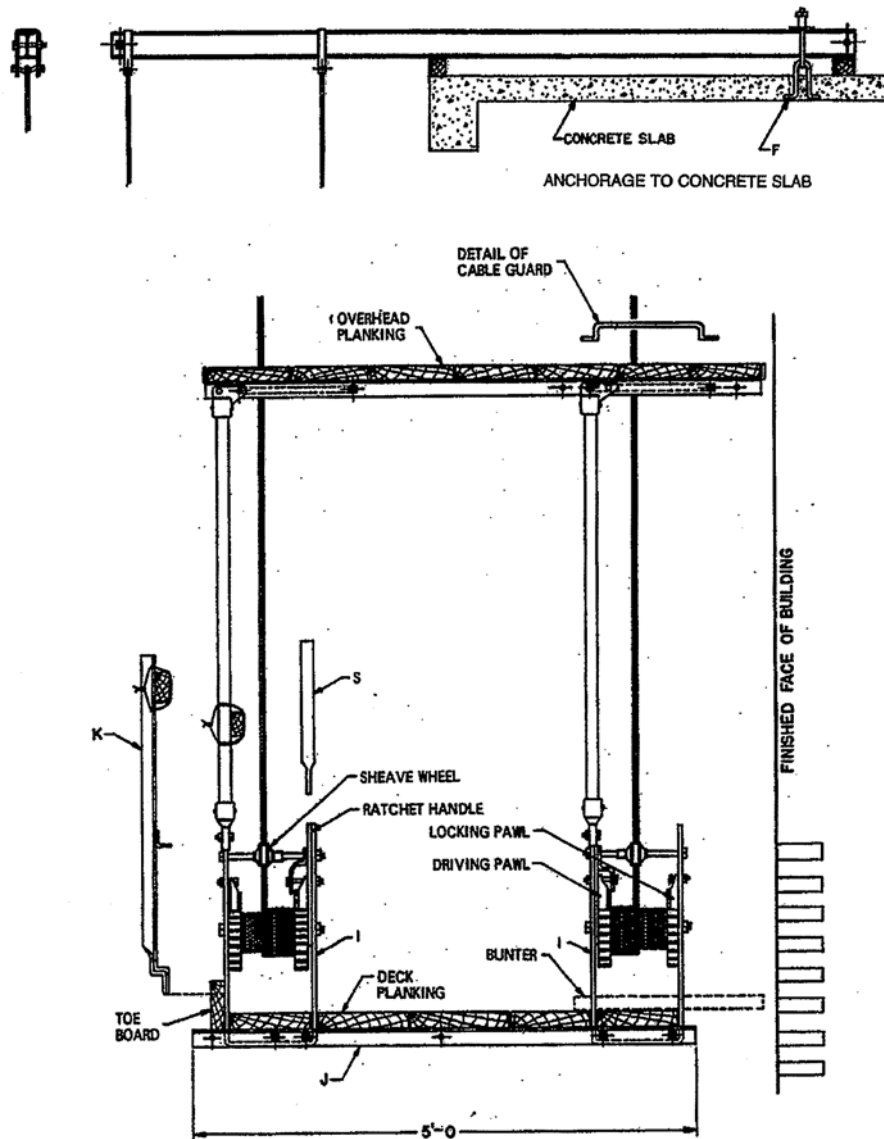
Explanatory Note

The proposed change to sections 13.33 (1), (1.1), (2) and (3) is to recognize that sometimes there are people involved in the work at a workplace that are not workers as defined in the *Workers Compensation Act*, but are contributing to the industry and are required to comply with the *Occupational Health and Safety Regulation* ("OHSR"). Changing the reference from "worker" to "person" in these sections corrects for this and makes these sections consistent with sections 13.33 (4) and (5) which already use the term "person".

AMENDMENTS FOR PART 13: LADDERS, SCAFFOLDS AND TEMPORARY WORK PLATFORMS
IN THE OCCUPATIONAL HEALTH AND SAFETY REGULATION

The proposed addition of section 13.33 (3.1) is intended to correct an inadvertent omission when Part 13 of the *OHSR* was redrafted and came into effect on January 1, 2005. Normally a person is not required to use a personal fall protection system on an outrigger or suspended mason's scaffold with guardrails on the open sides, and this exception was articulated in Part 13 of the *OHSR* prior to 2005. Section 13.33 (3) has the effect of requiring a person on a suspended mason's or outrigger scaffold to use a personal fall arrest system under all circumstances. Due to the design and nature of the use of this type of scaffold, it is not necessary for a person on such a scaffold to use personal fall protection, provided guardrails are in place on the open sides of the work platform. The proposed amendment will allow this type of scaffold to be used in a manner consistent with industry accepted safety standards.

The following illustration, from *ANSI Standard A10.8-2001 Safety Requirements for Scaffolding*, provides an end view of a typical suspended mason's scaffold. This scaffold type extends across the face of the building and has sufficient bays and suspension lines that in the event of a failure of one suspension line, the work platform will not tilt or substantially alter position. Note the upper part of the illustration shows how the outrigger beams are to be mechanically connected to the supporting structure. This type of scaffold is not to rely on counterweights to stabilize the outrigger beams.



WorkSafeBC Standard 13.30 Work Platforms Supported by Lift Trucks

1. Scope

- 1.1 This standard sets out the minimum requirements for the design and use of a work platform supported by a lift truck to elevate personnel.
- 1.2 This standard does not apply to an order picker or operator-up high lift truck designed to lift personnel.

2. Definitions

- 2.1 The definitions set out in Part 3 of *CSA Standard B335-04 Safety standard for lift trucks* apply to this standard.

3. Lift Truck Requirements

- 3.1 The lift truck used to support a work platform must meet the requirements of *CSA Standard B335-04 Safety standard for lift trucks*. (Note: *CSA Standard B335-04* incorporates the design and construction requirements of *ANSI/ASME B56.1 Safety Standard for Low Lift and High Lift Trucks* and *ANSI/ASME B56.2 Safety Standard for Rough Terrain Forklift Trucks*, so a lift truck manufactured to meet the applicable ANSI standard meets the requirements of *CSA Standard B335-04*.)
- 3.2 The lift truck must be in good working order with all controls and functions operating in accordance with the manufacturer's specification, the requirements of the applicable safety standard and the *Occupational Health and Safety Regulation*.
- 3.3 Forks must be secured against tilting or dislodgement.
- 3.4 If the lift truck uses a hydraulic or pneumatic system to raise the fork carriage the system must be equipped to prevent unintended descent of the carriage in excess of 0.6 metres per second in the event of hydraulic or pneumatic line failure.

4. Platform Requirements

- 4.1 The work platform must be built by the manufacturer to meet the requirements of the applicable lift truck safety standard or custom designed by a professional engineer in accordance with design criteria from the applicable lift truck safety standard. A custom designed platform must be certified by a professional engineer as having been built in conformance with the engineer's design.
- 4.2 The work platform must be legibly marked to show:
 - (a) The name of the manufacturer or the certifying engineer;
 - (b) If a manufactured platform, the part number or serial number to allow the design of the platform to be linked to the manufacturer's documentation;
 - (c) If a custom built platform, a unique identification number or code that links to the design and certification documentation from the engineer;
 - (d) The safety standard the platform was designed to meet;
 - (e) The weight of the platform when empty;

- (f) The rated load that may be placed on the platform (the maximum combined weight of the people, tools and materials permitted on the platform);
 - (g) The minimum rated capacity of the lift truck needed to safely handle the platform either by specifying the make and model of truck(s) that may be used with the platform or by specifying the minimum wheel track and lift truck capacity. (Note clause 5.7 of this standard requires the lift truck must have a minimum rated capacity of at least two times the weight of the platform plus the rated load for a high lift truck and at least three times the weight of the platform plus the rated load for a rough terrain forklift truck.)
- 4.3 The means or method for securing the work platform to the forks or fork carriage must be specified by the manufacturer or a professional engineer.
- 4.4 There must be a means to prevent the platform and carriage from rotating or pivoting.
- 4.5 The floor of the platform must have a slip resistant surface located not more than 200 mm (8 inches) above the normal load supporting surface of the fork.
- 4.6 Platform floor depth, measured from the front to the back, must not exceed two times the load centre distance specified on the lift truck name plate. The platform width must not be greater than the overall width of the lift truck measured to the outside of the load bearing tires, or to the outside of the stabilizers if they are to be used, plus 250 mm (10 inches) on either side of the tires or stabilizers as applicable.
- 4.7 If a particular application requires a platform with dimensions greater than specified in clause 4.6, a professional engineer must design the platform and limit its maximum rated load to ensure the platform and lift truck system will maintain stability at least equivalent to the stability performance a platform meeting clause 4.6 would provide consistent with the factors specified in clause 5.7.
- 4.8 There must be guardrail or equivalent protection on all sides of the platform. Guardrails or equivalent protection must meet the requirements of Part 4 of the *Occupational Health and Safety Regulation*. If due to the nature of the work task to be done, guardrails or equivalent protection is not practicable for one or more sides of the platform, there must be designated anchor points on the work platform for the securing of personal fall protection systems. There must be sufficient anchor capacity or individual anchors to allow for the maximum number of platform occupants to secure their personal fall protection systems. Personal fall protection systems must meet the requirements of Part 11 of the *Occupational Health and Safety Regulation*.
- 4.9 The platform must be constructed so it does not cause a hazard to the occupants and so the occupants cannot reach any hazard created by movement of the lifting mechanism of the lift truck.

5. Use Requirements

- 5.1 The instructions from the manufacturer or designer relating to safe use of the platform must be available in the workplace.

- 5.2 The lift truck and work platform must be in good condition and in compliance with the *Occupational Health and Safety Regulation* prior to use of the system to raise personnel.
- 5.3 The lift truck must be operated by a qualified operator authorized by the employer to use the lift truck to raise personnel in the work platform.
- 5.4 The work platform must be secured to the forks or fork carriage in the manner specified by the manufacturer or a professional engineer.
- 5.5 If the carriage of the lift truck can rotate or pivot, these functions must be disabled to prevent the platform and carriage from rotating or pivoting.
- 5.6 A trial lift must be performed at each task location immediately prior to raising personnel in the work platform to ensure the lift truck can be positioned on an appropriate supporting surface, there is sufficient reach to position the work platform to allow the task to be done, and the mast is vertical or the boom travels vertically. The tilt function for the mast may be used to assist with final positioning of the platform at the task location but the mast must travel in a vertical plane. The trial lift must ensure adequate clearance can be maintained between the work platform and the elevating mechanism of the lift truck and any surrounding object such as a structure, overhead obstruction, storage rack, or scaffold, and from any hazard such as energized electrical lines and equipment.
- 5.7 The weight of the platform plus the maximum rated load for the platform must not exceed one half the rated capacity of a high lift truck or one third the rated capacity of a rough terrain forklift truck for the reach and configuration being used.
- 5.8 A system for communication between the platform occupants and the lift truck operator must be implemented to control platform movement. If there is more than one occupant on the platform, one person on the platform must be designated to be the primary person to signal the lift truck operator regarding platform movement requests. If hand and arm signals are not the main communication method, a system of hand and arm signals must be developed as an alternative in the event the primary voice or other electronic communication means becomes ineffective during platform use.
- 5.9 The platform must be lowered to floor or grade level before a person gets on or leaves the platform.
- 5.10 Personnel must not be transported in the work platform, including between task locations.
- 5.11 If the platform does not have guardrail or equivalent protection on all sides, each platform occupant must use an appropriate personal fall protection system secured to a designated anchor point on the platform.
- 5.12 Platform occupants must work off of the platform surface and must not stand on guardrails or use other devices to increase the effective working height of the platform.

- 5.13 Whenever the platform is occupied, the lift truck operator must remain within 3 metres (10 feet) of the lift truck controls and in visual contact with the lift truck and platform and in communication with the platform occupants.