



# ALERT



## SUSPENDED WORK PLATFORM SAFE USE, MAINTENANCE & INSPECTION

UPDATED from January 2010 – See Section 6

The purpose of this alert is to provide information about the safe use, maintenance and inspection of suspended work platforms and control measures to minimize the risks associated with using this equipment. This alert is intended to increase awareness of the safety requirements for using suspended work platforms but does not replace the need to fully evaluate the nature of the equipment being used and the work being performed in order to comply with the Occupational Health and Safety Act (OHSA) and its regulations.

The most commonly used suspended work platforms (suspended platforms or suspended scaffolds) are known as swing stages. They are used for window cleaning or conducting repairs to the exterior of buildings and consist of a work platform, guardrails and a suspension system.

Multi Point Suspended Scaffolds are specialized suspended work platforms that have specific design and operational requirements in Sections 142.1 to 142.8 of O. Reg. 213/91 (the “Construction Regulation”). Anyone using this type of equipment must comply with the OHSA and Construction Regulation to ensure safe use.

The Ministry of Labour will continue its targeted inspections of construction worksites where there is a risk of falls, to ensure compliance with the OHSA and its regulations.

### Hazard

The most significant hazard associated with swing stages is workers falling from height. Some of the reasons why a fall may occur include:

- the swing stage over-turning because the counterweight does not have the adequate weight or if the “fulcrum” or point of support at the edge of the building fails; or
- the swing stage collapsing because it is overloaded, the platforms are inadequately attached (in case of modular type stages), or there is damage, such as but not limited to, exposure to chemicals or corrosive material to the motors, platforms, connections or wire ropes to which the stage is suspended, in addition to poor maintenance.

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## **Hazard Controls and Legal Requirements**

Under the OHSA, employers and supervisors are required to take every precaution reasonable in the circumstances to ensure the health and safety of workers.

### **1. Proper training**

Workers working on a suspended platform or suspended scaffold who may use a fall protection system must receive comprehensive fall protection training (Construction Regulation, section 26.2) and must receive:

- training on the use and inspection of the platform or scaffold, including access to and egress from it; and
- training on the erection and dismantling procedures where the workers are involved in these activities.

### **2. Wearing of a fall arrest system when working on suspended equipment**

A worker who is on or is getting on or off a suspended platform or suspended scaffold must wear a full body harness:

- that is connected to a fall arrest system with an independent lifeline, or
- that is securely fastened to the suspended platform or suspended scaffold, if all or part of the platform or scaffold has more than one independent means of support and the platform or scaffold is so designed, constructed and maintained that the failure of one means of support will not cause the collapse of all or part of the platform or scaffold. (Construction Regulation, section 141 and OHSA, section 28(1)(b)).

### **3. Proper design, construction and use of equipment**

- Every swing stage (suspended platform or suspended scaffold) must meet all the applicable requirements of the Construction Regulation and specifically sections 137 and 138.
  - The platform must not be overloaded (Construction Regulation, section 31(3) and 134(3)).
  - Equipment must be maintained in a condition that does not endanger a worker (Construction Regulation, section 93(1)).
  - Equipment must be used in accordance with any operating manual issued by the manufacturers (Construction Regulation, section 93(3)).
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- In addition to the above requirements, every suspended scaffold that consists of more than one platform, and every suspended platform that weighs, together with its components, more than 525 kilograms, must be designed by a professional engineer and erected in accordance with the design drawings. A professional engineer must inspect it prior to its first use and issue a written report in regard to the inspection. The Constructor must keep a copy of the design drawings and the professional engineer's written inspection report on the project while the suspended platform or suspended scaffold is on the project. (Section 139 of the Construction Regulation).

#### **4. Adequate maintenance of equipment, materials and protective devices**

- Employers must ensure that the equipment, materials and protective devices are maintained in good condition, (OHSA, section 25(1)(b)).
- Suppliers of machines, devices, tools or equipment under any rental, leasing or similar arrangement must ensure that the items are maintained in good condition, if it is the supplier's responsibility under the rental, leasing or similar arrangement to do so (OHSA, section 31).

#### **5. Proper inspection of equipment by a competent worker and by the supervisor**

- Suspended platforms or suspended scaffolds must be inspected prior to each day's use by a competent worker (Construction Regulation, section 137(11)) if it is operated by mechanical power and at least once a week by the supervisor or a competent person appointed by the supervisor (Construction Regulation, sections 14(2) and 15(2)).

#### **6. Best Practices**

The following standards provide best practices for the design, maintenance, inspection and testing of suspended platforms.

- CSA Z271 - Safety Code for Suspended Elevating Platforms section 7.5 outlines recommended inspections and tests for suspended platforms.
  - CSA Z271 - Safety Code for Suspended Elevating Platforms section 7.5.5 recommends that structural components of suspended platforms be tested and inspected at intervals not exceeding 12 months.
  - The following two CSA standards should be considered in the design, maintenance and repair of aluminum suspended platforms.
    1. Welded Aluminum Construction W59.2-M1991 (R2008)
    2. Strength Design in Aluminum / Commentary on CSA S157-05, Strength Design in Aluminum CAN/CSA-S157-05/S157.1-05 (R2010)
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When inspecting and testing all components of a suspended platform including welds, stirrups, connecting pins, connecting plates, trusses, beams and working surface, it is recommended that such testing be done by a professional engineer or a competent worker designated in writing by a professional engineer, using appropriate testing methods in the circumstances which may include non-destructive testing methods recognized by the Canadian General Standards Board.

### **For more information contact**

Infrastructure Health and Safety Association – [www.ihsa.ca](http://www.ihsa.ca)

Ministry of Labour website – [www.labour.gov.on.ca](http://www.labour.gov.on.ca)

Local Ministry of Labour office – [www.labour.gov.on.ca/english/about/reg\\_offices.php](http://www.labour.gov.on.ca/english/about/reg_offices.php)

Canadian General Standards Board - <http://www.tpsgc-pwgsc.gc.ca/ongc/home/index-e.html>

Canadian Standards Association – [www.csa.ca](http://www.csa.ca)

**This Ministry of Labour Alert has no legal effect and does not constitute and is not a substitute for legal advice. If you require specific assistance with respect to the interpretation of a legislative provision and its potential application to you, please contact your legal counsel.**

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