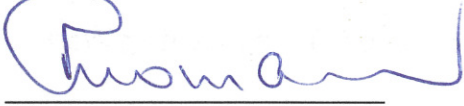
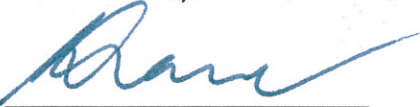


Complete Program Title: Scaffolds/Suspended Scaffolds and Powered Elevated Platforms Safety Program	Risk Management Manual (RMM) Number: 307
Approved by:  Vice-President, Administration  President and Vice-Chancellor	Date of Most Recent Approval: November 2016
Date of Original Approval: December 2003	Supersedes/Amends Program dated: May 2009
Responsible Executive: Vice-President, Administration	Enquiries: Environmental and Occupational Health Support Services (EOHSS) eoHSS@mcmaster.ca
DISCLAIMER: <i>If there is a discrepancy between this electronic program and the written copy held by the program owner, the written copy prevails.</i>	

1 PURPOSE

- 1.1 To provide for the safe use and maintenance of scaffolds, suspended scaffolds and powered elevating work platforms.
- 1.2 To ensure compliance with the Occupational Health and Safety Act, Working at Heights Standard and O. Reg. 297/13, Occupational Health and Safety Awareness and Training Regulations.

2 SCOPE

- 2.1 All members of the McMaster Community(Faculty, staff, contractors, volunteers, visitors and students) who are required to work on scaffolds, suspended scaffolds or powered elevating platforms.

3 Related Documents

- 3.1 Occupational Health and Safety Act
- 3.2 Canadian Standards Association, Z797-09(2014): Access Scaffolding for Construction Projects.

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- 3.3 Canadian Standards Association, Z271-10 (R2015): Safety Code for Suspended Elevating Platforms.
 - 3.4 National Standards of Canada CAN-B354.1-M82 for Elevating Rolling -Work Platforms.
 - 3.5 National Standards of Canada CAN/CSA-B354.2-01 & CAN3-B354.3-M82 for Self-Propelled Elevating work Platforms.
 - 3.6 National Standards of Canada CAN3-B354.4-02 for Boom-Type Elevating Work Platforms.
 - 3.7 National Standards of Canada CAN/CSA-C225-10 (R2015) for Vehicle-Mounted Aerial Devices
 - 3.8 RMM #100, Health and Safety Program.
 - 3.9 RMM #314, Working at Heights Protection Program
 - 3.10 RMM #300, Safety Orientation and Training Program.
 - 3.11 RMM #301, Standard Operating Procedures (SOP's) Program.
 - 3.12 RMM #313, Head Protection Program.
 - 3.13 RMM #312, Foot Protection Program.
 - 3.14 RMM #304, Working Alone Program.
 - 3.15 RMM #111, Contracting out Work Safety Program / Due Diligence Program.

4 DEFINITIONS

- 4.1 **Approved Scaffold** – A temporary structure for work above grade that has been approved as meeting all OHSA regulations and the above noted CSA standards.
- 4.2 **Approved Suspended Scaffold**- A working platform suspended by ropes or other means from an overhead structure that been approved as meeting all OHSA regulations and the above noted CSA standards.
- 4.3 **Authorized Workers** – Individuals who has been trained and certified as being competent to work safely on a specific task involving the use of scaffolds, suspended scaffolds or powered elevated platforms.
- 4.4 **Competent Person (OHSA)** – means a person who;
 - (a) is qualified because of knowledge, training and experience to organize the work and its performance,
 - (b) is familiar with the Act and the regulations that apply to the work, and
 - (c) has knowledge of any potential or actual danger to health or safety in the workplace.

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- 4.5 **Constructor** – means a person who undertakes a project for an owner and includes an owner who undertakes all or part of a project by himself or by more than one employer.
- 4.6 **Powered Elevating Platform** – A working platform attached to a hydraulically or pneumatically powered boom or mast that has been approved as meeting all OHS regulations and the above noted CSA standards.
- 4.7 **Employer**- A person who employs one or more workers or contracts for the services of one or more workers and includes a contractor or subcontractor who performs work or supplies services and a contractor or subcontractor who undertakes with the owner, constructor, contractor or subcontractor, to perform work or supply services.
- 4.8 **Ensure** – take every reasonable precaution to achieve the stated objective.
- 4.9 **Supervisor** – person who has charge of a workplace or authority over a worker.

Worker – means any of the following, but does not include an inmate of a correctional institution or like institution or facility who participates inside the institution or facility in a work project or rehabilitation program:

1. A person who performs work or supplies services for monetary compensation.
2. A secondary school student who performs work or supplies services for no monetary compensation under a work experience program authorized by the school board that operates the school in which the student is enrolled.
3. A person who performs work or supplies services for no monetary compensation under a program approved by a college of applied arts and technology, university or other post-secondary institution.
4. A person who receives training from an employer, but who, under the *Employment Standards Act, 2000*, is not an employee for the purposes of that Act because the conditions set out in subsection 1 (2) of that Act have been met.
5. Such other persons as may be prescribed who perform work or supply services to an employer for no monetary compensation; (“travailleur”)

4.10 **Acronyms**

JHSC – Joint Health and Safety Committee

CJHSC – Central Joint Health and Safety Committee

EOHSS – Environmental and Occupational Health Support Services

MOL – Ministry of Labour

OHSA - Occupational Health and Safety Act

RMSG – Risk Management Support Group

SOP – Standard Operating Procedure

FHS – Faculty of Health Sciences Safety Office

5 RESPONSIBILITIES

5.1 Role of Senior Managers (Directors / Deans / Chairs / Department Managers):

Senior Managers shall:

- provide the resources and direction necessary to support and maintain an effective Scaffolds / Suspended Scaffolds and Powered Elevated Work Platforms Safety Program.

5.2 Facilities Services/Other Departments Issuing Contracts for Construction Projects and/or Facilities and Equipment Repairs

Facility Services shall:

- ensure that the requirements outlined in the RRM #307 Scaffolds / Suspended Scaffolds and Powered Elevated Work Platforms Safety Program and other relevant policies and programs defined in the McMaster University Risk Management Manual are complied with;
- ensure that contractors and subcontractors demonstrate by documentation their ability to manage projects in compliance with McMaster University Health and Safety Policy and Risk Management Programs and the OHSA and applicable regulations and standards prior to being awarded a contract on University property; and
- ensure that regular inspections and safety audits are conducted on all project sites.

5.3 Contractors:

Contractors and Sub-contractors shall:

- ensure that all of the conditions outlined in the RRM #307- Scaffolds / Suspended Scaffolds and Powered Elevated Work Platforms Safety Program, and the McMaster Health and Safety Policy, and other relevant programs defined in the McMaster University Risk Management Manual are strictly enforced while working on McMaster University property;
- ensure that all related requirements under OHSA and applicable regulations and standards. are strictly enforced while working on McMaster University property; and
- ensure that only competent workers are assigned to the project.

5.4 Role of Supervisors:

Supervisors shall:

- be trained and authorized to supervise work involving the use of scaffolds, suspended scaffolds and powered elevated platforms;
- provide an SOP as required for all work involving the use of scaffolds, suspended scaffolds and powered elevated platforms;

- ensure that all of the conditions outlined in the RMM #307 Scaffolds / Suspended Scaffolds and Powered Elevated Platforms Safety Program and all regulations under the OSHA and applicable standards are strictly enforced;
- ensure that all workers assigned to work on scaffolds, suspended scaffolds and powered elevated platforms are trained and deemed to be competent in the safe use, care and maintenance of the specific equipment being used;
- ensure that the erection and dismantling of a scaffold is carried out under the direct supervision of a competent person;
- ensure that fall protection is provided and used as prescribed under the regulations and standards ;
- provide and post at the job site an emergency rescue plan for all work on scaffolds that requires workers to use a fall arrest system (See Example Appendix A.);
- ensure that the requirements, for scaffolds and suspended scaffolds to be professionally engineered and inspected by that engineer, are complied with according to applicable regulations; and
- implement and maintain a preventative maintenance program in accordance with manufacturer's recommendations for all scaffolds, suspended scaffolds and powered elevated platforms.

5.5 Role of Authorized Worker

Authorized Workers shall:

- participate in the development of the SOP for all work involving the use of scaffolds, suspended scaffolds and powered elevated platforms;
- follow the safety procedures outlined in the SOP and observe regulatory and standard requirements;
- inspect the equipment daily and report all deficiencies to their immediate supervisor; and
- report all incidents involving personal injury or property damage to their immediate supervisor and fill out an injury / incident Report.

5.6 Role of EOHSS/FHSc

EOHSS/FHS shall:

- provide advice regarding the development of SOPs for work involving the use of scaffolds, suspended scaffolds and powered elevated platforms if required; and
- update the program on a regular basis.

5.7 **Role of the Joint Health and Safety Committee**

The JHSC shall:

- review SOP's related to RRM #307- Scaffolds/Suspended Scaffolds and Powered Elevating Platforms Safety Program; and
- assess the effectiveness of the program as part of the safety inspection process.

5.8 **Role of the Central Joint Health and Safety Committee**

The CJHSC shall:

- Review and make comment on RRM #307- Scaffolds/Suspended Scaffolds and Powered Elevating Platforms Safety Program on a regular basis.

6 **PROCEDURES**

6.1 **Approval of Work Involving the use of Scaffolds / Suspended Scaffolds and Powered Elevating Platforms**

- 6.1.1 All work procedures involving the use of scaffolds, suspended scaffolds or powered elevated work platforms shall be drafted in compliance with the OHSA, regulatory procedures and standards and reviewed by the appropriate JHSC;
- 6.1.2 When scaffold heights exceed 15 metres (10 metres for a tube and clamp system), the site specific scaffolding must be approved by a professional engineer, erected according to the design, inspected by that engineer, and approved in writing by that engineer; and
- 6.1.3 Suspended scaffolds that consist of more than one platform or weigh more than 525 kg must, before they can be used, be designed by a professional engineer, erected in according to the design, inspected by that engineer and approved in writing by that engineer.

6.2 **Work Procedures**

- 6.2.1 The regulatory procedures for work involving the use of scaffolds, suspended scaffolds or powered elevated work platforms as outlined in **applicable regulations and standards** shall be deemed to be minimum standards of protection for work involving such equipment;
- 6.2.2 An SOP must be written for all work involving the use of scaffolds, suspended scaffolds or powered elevated work platforms;
- 6.2.3 The erection of, alteration, and dismantling of scaffolds will be carried out under the direction of a competent person;

- 6.2.4 Before scaffolding is erected an assessment of ground surface conditions, overhead electrical wires and obstructions, secure tie-in and outrigger locations and the potential for wind loading shall be performed;
- 6.2.5 Only trained and certified workers will work on scaffolds, suspended scaffolds or powered elevated work platforms;
- 6.2.6 Prior to being used scaffolds and powered elevated platforms shall be inspected for safety by an authorized supervisor and / or authorized worker;
- 6.2.7 Special purpose ladders and work platforms shall be used in accordance with the manufacturer's directions and only for the intended application;
- 6.2.8 Fall protection shall be provided and used when scaffolding is being erected and dismantled. (See RMM # 314 Working at Heights Protection Program);
- 6.2.9 Workers on scaffolds that are more than one tier in height, that have no guard rails, shall tie off with safety harness and shock-absorbing lanyards to secure anchor points (See RMM #314 Working at Heights Protection Program); and
- 6.2.10 Workers on powered elevated work platforms shall wear securely anchored fall protection and other personal protective equipment appropriate for the assigned work (See RMM #314 Working at Heights Protection Program).

6.3 **Emergency Procedures**

- 6.3.1 A two-way communications system will be provided for all work involving suspended scaffold; and
- 6.3.2 An emergency rescue procedure must be written and posted at the site of all projects that require the use of fall arrest equipment for work on scaffolds. See Appendix B

6.4 **Preventative Maintenance**

- 6.4.1 Preventative maintenance programs shall be established and maintained in accordance with the manufacture's recommendations for all McMaster University-owned scaffolds and powered elevating work platforms.

6.5 **Training**

- 6.5.1 All McMaster University supervisors and staff who are involved with work involving the use of scaffolds, suspended scaffolds or powered elevated work platforms, shall undertake and successfully complete an approved training course(s) which shall include but shall not be limited to the following:
 - (i) all requirements set out in the Working at Heights Training Standard that complies with the O. Reg. 297/13 Occupational Health and Safety Awareness and Training Regulation; to be provided by Chief Prevention Officer (CPO) approved trainer.

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- (ii) RMM #307- Scaffolds / Suspended Scaffold and Powered Elevated Platforms Safety Program;
 - (iii) the regulatory procedures for work involving the use of scaffolds, suspended scaffolds or powered elevated work platforms theory and hands- on training on the use, inspection, care and maintenance of scaffolds, suspended scaffolds or powered elevated work platforms safe use and care of fall arrest equipment; and
 - (iv) emergency procedures.

7 RECORDS

- 7.1 Preventative maintenance and safety training records for work with University owned scaffolds, suspended scaffolds or powered elevated work platforms shall be maintained, by, while owned by, the operating department and thereafter for a period of three years.

Appendix A: Reference Material

<https://www.ontario.ca/laws/regulation/910213>

<https://www.ontario.ca/laws/regulation/900851>

Appendix B

Aerial Lift Fall Arrest Rescue Plan

- When a fall arrest has occurred, the spotter shall use the lifting device's ground level controls or remove the hydraulic release pin to lower the worker safely to the ground.
- If emergency assistance is required, the spotter shall immediately dial Security Services at ext. # 24281 and provide the following information:
 - 1) Your name
 - 2) Building number/room number/location
 - 3) That a fall arrest has occurred
 - 4) Emergency services required (i.e. ambulance, fire department.)
- Once the fall arrested worker has been safely lowered to the ground, the spotter shall immediately provide any necessary first aid until medical personnel arrive.
- Do not remove the fall arrested worker's harness. Medical personnel will do this.
- The spotter shall remain in charge of the situation until the fire department arrives.

Fall Arrest Rescue Plan

Davit Arm, Scaffold and Roof Inspections

- When a fall arrest has occurred the spotter shall immediately dial Security Services at Ext. 24281 and provide the following information:
 - 1) Your name
 - 2) Building number, room number and location
 - 3) That a fall arrest has occurred
 - 4) Emergency services required (i.e. ambulance, fire department.)
- If self rescue is not possible the spotter shall not attempt to perform the rescue. The fire department shall conduct the rescue.
- If the fall arrested worker is conscious, the spotter shall encourage the worker to keep their legs moving and raise their knees into the body to help prevent the pooling of blood in the legs.
- The spotter shall remain in charge of the situation until the fire department arrives.
- Stay calm, talk to the fall arrested person, tell them help is on the way and they are going to be ok.

Fall Arrest Equipment Inspection Checklist

Equipment	Component	Pass/Fail	
		Before Use	After Use
Full Body Harness	Webbing		
	Stitching		
	Metal Buckle		
	Grommets		
	Strap Keepers		
	D-Ring		
Locking Snap Hooks	Hook		
	Lock		
	Springs		
Lanyard	Webbing		
	Stitching		
	Jacket		
	End Loops		
	Stretching		
	Connection		
	Knots		

Note: If any component fails inspection the full body harness shall be removed from service and tagged with Form # FS - 007 “Do Not Use.”

Equipment ID: _____ Work Order # _____

Inspection Date: _____

Inspected By: _____

Signed By: _____