YORK UNIVERSITY

LADDER SAFETY PROGRAM

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Reviewed by: Occupational Health & Safety, Central Utilities, HSO-Faculty of Health

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York University Ladder Safety Program

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I. Introduction

Portable ladders are used in a wide variety of settings at York University such as light changing, ceiling work, cabling etc. Unsafe use of portable ladders can result in serious injuries from falls or, in the case of metal ladders, electrical shock. Portable ladders must be maintained in good condition at all times, and inspected before each use. Training is also an important aspect of portable ladder safety and accident prevention.

II. Objective

To protect workers from hazards related to the use, handling and storing of portable ladders. Workers will be trained on the safe use, handling and storing of portable ladders.

III. Definitions *

Combination ladder - A portable ladder capable of being used either as a stepladder or as a single or extension ladder.

Extension ladder - A non-self-supporting portable ladder adjustable in length.

Multi-functional ladder- The multi-function ladder uses lockable hinge joints and extension ladder design to function in a number of ways.

Platform ladders- Ladders with wheels that allow it to be transported easily to its destination.

Single Ladder- A non-self-supporting portable ladder, nonadjustable in length, consisting of one section only. Single ladders may be either step- or rug-type.

Stepladder - A stepladder is a self-supporting portable ladder, nonadjustable in length, having flat steps and a hinged back. Its size is designated by the overall length of the ladder measured along the front edge of the side rails.

Step stool**- A self-supporting, foldable, portable ladder, nonadjustable in length, 32 inches or less in overall size, with flat steps and without a pail shelf, designed so that the ladder top cap as well as all steps can be climbed on. The side rails may continue above the top cap.


**This program does not apply to the use of stepstools.
IV. Legislation and Standards

In the Occupational Health and Safety Act (OHSA), Industrial Establishments Regulation R.R.O 1990, Reg.851, section 73 outlines the requirements on the use of a ladder in the workplace. Refer to Appendix 1. In addition, there are standards on portable ladders specified on CSA (Canadian Standards Association) Can 3-Z11-M81 (R2005).

V. Application

This program applies to all workers and their supervisors and department managers who in their course of work may use ladders.

VI. Requirement

All employees who use ladder(s) during the course of work should be familiar with this program. Ladder users must be able to recognize ladder hazards and be aware of safe practices in setting up, storing, moving and working from ladders to prevent injuries from occurring.

VII. Roles and Responsibilities

Supervisors and Department Managers

It is the responsibility of all Supervisors and Department Managers to ensure that any employee at York University who may use a ladder is familiar with this program and receives ladder safety training. They should:

1. Identify workers who need training
2. Provide training
3. Ensure that workers inspect ladders before each use and report any defects
4. Send training records to OHS
5. Maintain an inventory of the ladders used in the area
6. Keep records of regular ladder inspections (See Appendix 3 for the suggested inspection checklist)

Note: The Dept. Managers who contract out work involving the use of ladders, should ask for ladder safety training records for the contract workers.
Workers

It is the responsibility of the ladder users to:

1. Attend training
2. Select ladder of proper length to reach working height
3. Select ladder grade by projected use and load rating (see Appendix 2)
4. Never use metal ladder for electrical work (where electrical contact is possible)
5. Inspect ladders (see Appendix 3) before using them and report any defects/hazards to their supervisor
6. Follow ladder use requirements and safe work practices
7. Workers who need to use ladders should identify themselves to their supervisor/manager
8. Ensure that ladders are properly stored

Safety rules to remember when handling ladders:

- Do not make temporary or makeshift repairs to ladders
- Do not try to straighten or use bent or bowed ladders
- Tag any defective ladders and take them out of service immediately

Note: Fall-arresting equipment such as ladder climbing devices or lifelines should be used when working from long fixed ladders or when climbing vertical fixed ladders.

Occupational Health and Safety

It is the responsibility of the Occupational Health and Safety to provide advice and safety information and maintain a central training record.

VIII. Training

All employees expected to perform work on and use portable ladders must receive appropriate training.

a. Form of Training

Workers will review the DVD (~19 minutes length) titled: “A Practical Approach to Ladder Safety”. The training coordinator will follow The Leader’s Guide and administer the quiz. The training package (including DVD, handout, Leader’s guide and the quiz) is available and can be obtained from OHS.

The topics covered in the DVD include: selecting the correct ladder, transporting ladders properly, setting up ladders on uneven and unstable
surfaces, placing ladders against round objects, standing and working on ladders safely and use of multi-function ladders.

b. Record of Training

All training must be documented and records must be kept. A copy of the sign-in sheet and completed quiz must be sent to the Occupational Health and Safety.

c. Frequency of Training

The Occupational Health and Safety recommends that this training be taken once every 3 years.

IX. Program Review

The Ladder Safety Program shall be reviewed once every two years in consultation with Joint Health and Safety Committees and Health and Safety Representatives.

X. Resources

The following links provide information on Ladder Safety.

1. CCOHS: Canada’s National Centre for Occupational Health and Safety Information:
   http://www.ccohs.ca/oshanswers/safety_haz/ladders/


   http://ohsviewaccess.csa.ca/viewStandards.asp


XI. Appendices

Appendix 1. Legislation

Industrial Establishments Regulation R.R.O 1990, Reg.851, s.73:

A portable ladder shall,

(a) be free from broken or loose members or other faults;

(b) have non-slip feet;
(c) be placed on a firm footing;

(d) where it,

   (i) exceeds six meters in length and is not securely fastened, or
   (ii) is likely to be endangered by traffic,

   be held in place by one or more workers while being used; and

(e) when not securely fastened, be inclined so that the horizontal from the top support to the foot of the ladder is not less than $\frac{1}{4}$ and not more than $\frac{1}{3}$ of the length of the ladder.

Appendix 2. Classification of Portable Ladders


<table>
<thead>
<tr>
<th>Grade</th>
<th>Projected Use</th>
<th>Load Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Construction and Industrial</td>
<td>Heavy</td>
</tr>
<tr>
<td>2</td>
<td>Tradesman and Farm</td>
<td>Medium</td>
</tr>
<tr>
<td>3</td>
<td>Household</td>
<td>Light</td>
</tr>
</tbody>
</table>
Appendix 3. Ladder Inspection Checklist

The following checklist covers many areas of potential problems. It may be used as a maintenance, department or pre-shift check. Modify it to your needs.

(Recommended to be posted near and/or in the location where ladders are stored)

<table>
<thead>
<tr>
<th>Dates of Inspection</th>
</tr>
</thead>
</table>

☑ Acceptable ☒ Unacceptable

<table>
<thead>
<tr>
<th>Loose steps or rungs (moveable by hand)?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loose/missing nails, screws, bolts or other metal parts?</td>
</tr>
<tr>
<td>Cracked, spilt, rusted or broken uprights, braces, and rungs?</td>
</tr>
<tr>
<td>Wooden parts (smooth, no splinters)?</td>
</tr>
<tr>
<td>Damaged or worn non-slip bases?</td>
</tr>
<tr>
<td>Ladder stable?</td>
</tr>
<tr>
<td>All moving parts moving freely (lubricated as required by manufacturer)?</td>
</tr>
<tr>
<td>Wobbly (from side strain)?</td>
</tr>
<tr>
<td>Loose or bend hinge spreaders?</td>
</tr>
<tr>
<td>Stop on hinge spreader broken?</td>
</tr>
<tr>
<td>Loose hinges?</td>
</tr>
<tr>
<td>Broken, split, or worn steps?</td>
</tr>
<tr>
<td>Loose, broken, or missing extension locks?</td>
</tr>
<tr>
<td>Defective locks that do not seat properly while extended?</td>
</tr>
<tr>
<td>Worn or rotted rope?</td>
</tr>
<tr>
<td>Identification marks (legible)?</td>
</tr>
<tr>
<td>Ladder (stored properly when not in use)?</td>
</tr>
</tbody>
</table>

Certification:

Initials of person making inspection

Notes: