Portable Ladder Safety
Environmental Health and Safety
I. Purpose
This program is intended to provide guidance on the inspection, safe usage, and care of portable ladders to protect individuals from the hazards associated with their use.

II. Scope
A. This program applies to staff, students, and contractors who perform tasks utilizing portable ladders.
B. For the purpose of this program, portable ladders include mobile ladder stands and platforms.
C. This program does not apply to fixed ladders, which are covered in Northwestern’s Fall Protection program.

III. Responsibilities
A. Environmental Health and Safety (EHS)
   i. Review, audit, and revise this program annually or anytime deemed necessary.
   ii. Provide online training to applicable Northwestern departments.
   iii. Provide additional training as needed to aid in program compliance.
   iv. Provide guidance and technical assistance as needed.
B. Departments and Units
   i. Designate individual(s) to ensure compliance with this program.
   ii. Ensure the care, selection, usage, and storage of portable ladders in accordance with this program and manufacturer’s guidelines.
   iii. Immediately remove damaged or defective portable ladders from service.
   iv. Monitor employees’ and students’ need for additional or refresher training, based upon assigned duties, observed work practices, changes to the worksites, or changes to this program.
   v. Coordinate with EHS to ensure all employees and students receive portable ladder safety training.
   vi. Contact EHS for guidance and technical assistance as needed.
   vii. Report all incidents (e.g., injuries, property damage, near misses) to EHS.
C. Portable Ladder Users
   i. Adhere to the requirements of this program.
   ii. Successfully complete all required training as outlined in Section V.
   iii. Properly select, inspect, use, handle, and store ladders in accordance with this program and manufacturer’s guidelines. Refer to the Portable Ladder Inspection Guidelines (see Appendix 1) and Safe Work Practices (see Appendix 2).
   iv. Immediately report damaged or defective portable ladders to supervisors.
   v. Report all incidents (e.g., injuries, property damage, near misses), hazards, and unsafe working conditions to supervisors.
   vi. Wear appropriate personal protective equipment correctly.
D. Contractors
   i. Adhere to the requirements of this program.
   ii. Responsible for supplying and using their own portable ladders.
   iii. Prohibited from using Northwestern portable ladders.
   iv. Ensure employees are trained, applicable to the work being performed and portable ladder type(s) used.
IV. Requirements

A. General
Departments, units, users, and contractors are encouraged to identify and utilize alternative solutions instead of using portable ladders, when possible (e.g., light bulb changing pole).

B. Approval
All portable ladders used on Northwestern property must be of an approved type by the American National Standards Institute (ANSI).

C. Labeling
   i. Portable ladders must have all labels in place and labels must be legible.
   ii. Labels must indicate the size, type or duty rating, maximum working length, highest standing level, number and total length of sections (if applicable), model number or name, manufacturer’s name and location, date of manufacturer, and American National Standards Institute (ANSI) standard compliance.
   iii. Usage guidelines and other warning statements (e.g., warning, caution) from the manufacturer must also be in place on the portable ladders in specific locations depending on ladder type.

D. Inspection
   i. All portable ladders must be inspected when originally purchased, received, and put into service, and by the user prior to use. Refer to the Portable Ladder Inspection Guidelines (see Appendix 1) and the manufacturer’s specifications for guidance on inspecting and maintaining portable ladders.
   ii. Portable ladders found to be defective or damaged must be tagged “Dangerous: Do Not Use This Ladder” and immediately removed from service until repaired or replaced.

E. Electrical Hazards
   i. Take proper safety measures to avoid portable ladder or tool contact with electrical circuits, wiring, or power lines.
   ii. Take all necessary measures to prevent any contact or possible contact with an energized, uninsulated circuit or conductor in order to avoid electrical shock or short circuit.
   iii. The use of metal portable ladders (e.g., aluminum) or portable ladders with metal components (e.g., wood ladders with side-rail metal reinforcement wires) around electrical sources of energy, or while performing electrical work, is prohibited.
   iv. Metal portable ladders must have a label indicating to not use near electrical equipment or energy sources.

F. Maintenance
   i. Adhere to the manufacturer’s recommended guidelines for maintenance.
   ii. Field repairs and modifications to portable ladders are prohibited.
   iii. Do not attempt to straighten a bent or bowed portable ladder.
   iv. Do not paint portable wood ladders as the paint could hide defects.

G. Storage
Portable ladders must be stored in areas free of hazards, away from heat, fire, moisture, direct sunlight, and chemicals, and in accordance with the manufacturer’s guidelines.
V. Training
   A. General
      Departments and units are responsible for ensuring faculty, staff, and students are
      properly trained and proficient in the selection, inspection, use, handling, storage, and
      hazards associated with using portable ladders.
   B. Requirements
      Portable ladder training is required:
      i. Before a faculty or staff member or student is initially assigned a task involving
         the use of a portable ladder.
      ii. Whenever there is a change in assigned duties, worksite conditions, or hazards
          to which the faculty or staff member or student has not been previously trained.
      iii. If there are observed inadequacies in a faculty or staff member’s or student’s
           knowledge or execution of safe portable ladder use.
   C. Online Training
      i. Portable ladder training is available online through myHR Learn.
      ii. Departments and units are responsible for providing EHS current staff and
          faculty lists to ensure they are registered for training.
      iii. Departments and units with students who use portable ladders (e.g., theaters)
          are responsible for ensuring students complete the online training prior to
          ladder use.
   D. Refresher Training
      Portable ladder refresher online training is required annually.
   E. Specialty Portable Ladders
      Departments and units with faculty, staff, and/or students whose work activities involve
      the use of specialty ladders, such as platform ladders, combination ladders, or
      articulating ladders, must provide additional instruction on inspection and safe usage by
      a competent person prior to use. Contact EHS for guidance and assistance with specialty
      portable ladders.
   F. Recordkeeping
      Training records are maintained in Northwestern myHR Learn.

VI. Regulatory Authority and Related Information
Northwestern and contractors will comply with the Occupational Safety and Health
Administration (OSHA) and ANSI standards, and any other applicable codes and standards,
including:

   OSHA 29 CFR 1910.23 – Ladders
   Northwestern’s Fall Protection Program
   National Institute of Occupational Safety and Health (NIOSH) Ladder Safety App
   ANSI ASC A14 – Ladder Standards

VII. Contact
For questions, contact Chris Yohe, Environmental and Occupational Health and Safety Specialist
Lead, at chris.yohe@northwestern.edu or (847) 467-6342.
Appendix 1 – Portable Ladder Inspection Guidelines

### Platforms
- No significant denting, bending, or twisting
- No creases, cracks, cuts, or holes
- Support bar / attachments undamaged & secure
- Linkage mechanism present and secure
- Opens & closes with no excessive play or force
- Anti-slip platform undamaged and effective
- Free from dirt, mud, paint, oil, and grease

### Rungs / Treads
- All present and secure within stiles / ladder sections. No swaging splits
- No bends, bows, twists, or significant denting
- No creases, cracks, cuts, or holes
- Anti-slip surface undamaged and effective
- All rivets / other fixings present and secure
- Free from dirt, mud, paint, oil, and grease

### Braces / Cross Tubes
- No bending, bowing, folding, or creasing
- No twisting or rotation
- All rivets / other fixings present and secure
- No creases, cracks, cuts, or holes
- No significant denting
- No significant corrosion of components
- Swaging not split or otherwise damaged

### Fixings
- Check the condition and tightness of all fixings including screws, bolts, and rivets
- Check that there are no missing fixings
- Check the ladder around each fixing for wear and signs of damage

### Locking Catches
- Check that all fixings are in place, are tight and that there is no distortion of the stiles where the locking catches are attached
- Not bent, twisted, or corroded
- Check that they lock and unlock correctly

### Guide Brackets
- Present & secure. No displacement, looseness
- No bending, cracks, cuts, or holes
- All rivets / other fixings present and secure
- No significant corrosion

### Rung Hooks
- Present & secure. No displacement, looseness
- No bending, cracks, cuts, or holes
- All rivets / other fixings present and secure
- No significant corrosion
- Fits positively on the rung

### Stiles / Frame Sections
- Not bent, twisted, or bowed
- Generally rigid and no longitudinal twisting
- Front to rear frame attachment / hinging secure
- All rivets / other fixings present and secure
- No creases, cracks, cuts, or holes
- Free from dirt, mud, paint, oil, and grease
- No significant denting or corrosion of components
- All end tips / covers correctly present and secure
- All stops/bushes and other safety restraint devices present, secure, and undamaged
- Stabilizers, where required and fitted, present, secure, and undamaged

### Feet / Tips / End Caps
- Present & secure. Correct feet & top tips fitted
- Stile ends undamaged
- All rivets / other fixings present and secure
- No distortion, cracks, cuts, or holes
- Anti-slip ground contact undamaged & effective
- Free from dirt, mud, paint, oil, & grease

### Failed Inspection
- Ladders that do not pass the inspection must be immediately removed from service and tagged “DANGER: DO NOT USE THIS LADDER” until repaired or destroyed
- Notify your supervisor of any ladders that do not pass inspection

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**Portable Ladder Safety**

**Environmental Health and Safety ● January 2021**
Appendix 2 – Portable Ladder Safe Work Practices

General Precautions

✔ Only use ladders and appropriate accessories (ladder levelers, jacks, or hooks) for their designed purposes.
✔ Do not place a ladder on boxes, barrels, or other unstable bases to obtain additional height.
✔ Do not move or shift a ladder while a person or equipment is on the ladder.
✔ Use a ladder only on a stable and level surface, unless it has been secured (top or bottom) to prevent displacement.
✔ A ladder placed in any location where it can be displaced by other work activities must be secured to prevent displacement or a barricade must be erected to keep traffic away from the ladder.

✔ Do not use a self-supporting ladder (e.g., step ladder) as a single ladder or in a partially closed position.
✔ Read and follow all labels/markings on the ladder.

⚠️ DANGER
⚠️ WARNING
⚠️ CAUTION

✔ Always maintain 3-points (two hands and a foot, or two feet and a hand) contact on the ladder when climbing.
✔ Keep your body near the middle of the step and always face the ladder while climbing.
✔ Be sure that all spreaders and locks are properly engaged.

✔ An extension or straight ladder used to access an elevated surface must extend at least 3 feet above the point of support.
✔ Do not stand on the three top rungs of a straight, single, or extension ladder.

✔ Do not use the top step/rung of a ladder as a step unless it was designed for that purpose.

✔ The proper set-up angle is to place the ladder base 1/4 of the working length of the ladder from the wall or other vertical surface.

✔ Look for overhead power lines before handling a ladder.
✔ Do not use a metal ladder near power lines or exposed electrical equipment.

Learn more: Complete Ladder Safety training and review the March 2019 and September 2017 Spotlights on Safety.