PORTABLE LADDER SAFETY PROCEDURES

I. PURPOSE

The purpose if this procedure is to establish safe work practices in the use and care of portable ladders.

References: CFR 1910.23 OSHA General Industry Standards
             CFR 1926.1053 OSHA Construction Industry Standards

II. SCOPE

This procedure applies to all portable ladders utilized by University faculty, staff, students and contractors.

III. DEFINITIONS

1. Angle of Inclination: Preferred pitch (angle) for a portable non-self-supporting ladder (straight or extension ladder).
2. Articulated Joint: A hinge, which is able to be locked in one or more positions.
3. Back Leg: The rear legs of a self-supporting portable ladder section that are joined by rungs, bars, rear braces or other bracing to form the back section.
4. Combination Ladder: A portable ladder that can be used as a stepladder, extension ladder, trestle ladder, or stairway ladder. The components of a combination ladder also may be used separately as a single ladder.
5. Extension Ladder: A self-supporting portable ladder adjustable in length, consisting of two or more sections.
6. Mobile Ladder Stand: A mobile, fixed-height, self-supporting ladder that usually consists of wheels or casters on a rigid base and steps leading to a top step. It may also have handrails and designed for use by one person at a time.
7. Platform Ladder: Self-supporting portable ladder of fixed height with a platform used as a working or standing location.
8. Portable Ladder: A ladder that can be easily moved or carried, and consists of side rails, joined at intervals by steps, rungs, or cleats.
9. Rung/Step/Cleat: The crosspiece of a ladder on which an individual steps to climb up or down.
10. Single Ladder: A non-self-supporting portable ladder, nonadjustable in length and consisting of one section.
11. Stepladder: A self-supporting, portable ladder that has a fixed height, flat steps, and a hinged back.
12. Stepstool: A self-supporting, fixed-height portable ladder that has flat steps and side rails and does not exceed 32 inches from the top cap and is designed so an individual can climb and stand on all steps and the top cap.
13. Straight Ladder: An articulated ladder where all of the sections are in line.
14. Top Cap: The uppermost horizontal member of a portable stepladder or step stool.
15. Top Step: The first step below the top cap of a portable stepladder or step stool. Where a ladder does not have a top cap, the top step is the first step below the top of the rails.
17. Working Load: The maximum applied load, including the weight of the user, materials, and tools.

IV. PORTABLE LADDER CATEGORIES

<table>
<thead>
<tr>
<th>LOAD CAPACITY</th>
<th>DESCRIPTION</th>
<th>CSA CODE</th>
<th>ANSI CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>200 lbs./91 kg</td>
<td>Household - Light Duty</td>
<td>Grade 3</td>
<td>Type III</td>
</tr>
<tr>
<td>225 lbs./102 kg</td>
<td>Tradesman and Farm - Medium Duty</td>
<td>Grade 2</td>
<td>Type II</td>
</tr>
<tr>
<td>250 lbs./113 kg</td>
<td>Construction and Industrial - Heavy Duty</td>
<td>Grade 1</td>
<td>Type I</td>
</tr>
<tr>
<td>300 lbs./136 kg</td>
<td>Construction and Industrial - Heavy Duty</td>
<td>Grade 1A</td>
<td>Type IA</td>
</tr>
<tr>
<td>375 lbs./170 kg</td>
<td>Construction and Industrial - Heavy Duty</td>
<td>Grade 1AA</td>
<td>Type IAA</td>
</tr>
</tbody>
</table>

*Includes user and materials

V. PROCEDURES

1. Only Type I, Type IA or Type IAA portable ladders should be utilized by University departments and personnel.
2. Ladders should be inspected before each use to identify any visible defects.
3. Read and follow all labels, marking and instructions posted on ladders.
   a. The labels and markings shall always be legible.
   b. Ladders without attached labels, markings, load limit, and instructions shall not be used and should be removed from service.
4. Metal ladders shall not be used to perform any work on electrical systems (energized or de-energized), to include changing light bulbs.
5. The maximum working load rating of ladders shall not be exceeded.
6. Extension or straight ladder used to access an elevated surface (roof or platform) shall extend at least 3 feet above the point of support (roof or platform edge).
7. The proper angle for a straight or extension angle is the base is set ¼ of the length of the ladder from the wall or other vertical surface.
8. Ladders shall not be placed on boxes, barrels or other unstable bases to obtain additional height.
9. Wooden ladders shall not be painted or coated with any material that may obscure structural defects.
10. Broken or bent ladders and ladders with missing or worn part shall be taken out of service and marked “Dangerous – Do Not Use”.
    a. In the event the ladder is discarded, it shall be destroyed in such a manner as to render it useless.
VI. ADDITIONAL INFORMATION

Additional information on ladder use, safety and care can be found at the following websites:

- [https://www.americanladderinstitute.org/page/Ladders101](https://www.americanladderinstitute.org/page/Ladders101)
- [https://www.osha.gov/Publications/portable_ladder_qc.html](https://www.osha.gov/Publications/portable_ladder_qc.html)
Common Ladder Safety Rules

- Maintain a 3:1 Ratio
- Don’t Carry Tools and Equipment While Climbing
- Maintain 3 Points of Contact
- Don’t Use the Top Step of the Ladder
- Prevent Passersby From Going under the Ladder
- Don’t Use Damaged Ladders. Inspect for Damage
- Secure the Base of the Ladder
- Don’t Place on Uneven Unstable Ground
- Wear Proper Footwear
- Don’t Use Near Doorways. Lock the Door if Necessary. Beware locking exit routes!
- Secure the Top of the Ladder
- Don’t Lean Away from the Ladder. Stay Centered Between the Rails

LADDER RULES

- ALWAYS FACE LADDER WHEN ASCENDING OR DESCENDING
- USE AT LEAST ONE HAND TO GRASP LADDER
- TOP OF LADDER SHOULD NEVER BE USED AS A STEP
- LADDERS SHOULD NEVER BE MOVED, SHIFTED, OR EXTENDED WHILE OCCUPIED
- NEVER CARRY AN OBJECT OR LOAD THAT COULD CAUSE YOU TO LOSE YOUR BALANCE

Graphics and images provided by American Ladder Institute