

Chapter 15: [Ladder and Scaffold Safety](#)

Portable Ladder Requirements

Product ID: [486](#) | Revision ID: 1434 | Date published: 16 November 2012 | Date effective: 16 November 2012

URL: <http://www-group.slac.stanford.edu/esh/eshmanual/references/ladderReqPortable.pdf>

1 Purpose

The purpose of these requirements is to ensure portable ladders comply with Cal/OSHA regulations and industry standards for safe use. They cover the procurement, inspection, and use of all portable ladder types (extension, step, straight, and mobile). They apply to workers using portable ladders, ladder custodians, and the ladder safety program manager.

2 Requirements

2.1 Procurement

Only ladders that comply with the applicable American National Standards Institute (ANSI) standard for the ladder type can be authorized for purchase.

Note *The procurement of wooden ladders is discouraged due to more intensive maintenance and inspection requirements (see [ANSI ASC A14.1](#)).*

2.2 Selection

The ladder appropriate to the work must be selected based on required height, type, and design.

- Always use portable ladders manufactured to ANSI ASC A14 series standards

Note *Fiberglass or composite ladders with a duty rating of Type IAA, Special Duty Rugged Professional, are highly recommended.*

- Select the correct length or height of ladder for the task:
 - Extension ladders must extend three feet above the roof or platform.
 - Extension ladders must be long enough so that the worker stands below the third from the last rung.
 - Step ladders must be high enough so that the worker stands below the second rung from the top.

For more information, see [Ladder Safety: Using Portable Ladders Safely](#).

2.3 Inspections

2.3.1 Pre-use

Ladder users must visually inspect a ladder before each use. Inspection items are provided in [Ladder Safety: Portable Ladder Pre-use Inspection Checklist](#).

If the ladder fails inspection, the ladder must be tagged out immediately (attach DO NOT USE sign) and removed from service by locking it out. In addition, the ladder custodian or supervisor must be informed immediately, who must then ensure the ladder cannot be used until it is repaired or disposed of.

2.3.2 Ongoing

The ladder safety program manager provides ongoing safety oversight and if a sub-standard ladder is identified he/she will take it out of service and notify the affected supervisor or custodian. The ladder must then be repaired or destroyed.

2.4 Use

2.4.1 General Safety Rules

These rules apply to the use of all portable ladder types:

- Complete all required ladder safety training before using a ladder to reach a height of 48 inches or higher
- Only use a ladder for the purpose for which it is designed
- Do not let anyone else use a ladder while you are
- Check the rating of the ladder and verify that you will not exceed its capacity (include body weight and tools)
- Always face the ladder when ascending or descending
- Always place a ladder only on a stable surface (never on a box or any unstable area)
- When used in a doorway, barricade or guard the area around the ladder
- Do not move, shift, or extend a ladder while it is occupied – never “walk” a ladder
- Do not overextend sideways. Use the belt buckle rule: keep your belt buckle positioned between the side rails.
- Use both hands to climb the ladder – carry objects in a backpack or on tool belt
- Do not carry any object that may cause you to lose balance or fall
- If an object cannot be carried safely use a rope to raise or lower it
- Secure ladders during transport and store properly to avoid damage
- Do not use a metal ladder when the risk of contact with an energized conductor or circuit exists
- Do not paint wooden ladders. Limited marking or stenciling is permissible.

- Do not modify a portable ladder

2.4.2 Safety Rules for Specific Ladder Types

These additional safety rules apply to the specified ladder type.

2.4.2.1 Step Ladders

- Do not use the ladder top (cap) or the rung below it for standing or stepping
- Do not stand on rear bracing or spreaders
- Never use a step ladder that is not fully opened and be sure the spreaders are locked

2.4.2.2 Ladder Stands

- Ensure safety feet or non-skid material are functional and in good condition
- Ensure spring mechanisms and locking brakes are functional and in good condition
- Do not over-reach or stand on tip-toes to reach beyond the ladder; find a higher ladder
- Do not stand on hand rails (if present)

2.4.2.3 Single and Extension Ladders

- Remove from service single and extension ladders without safety feet
- Do not use the top section of an extension ladder as a straight ladder
- Do not tie or fasten ladders together unless specifically designed for such use
- Do not make adjustments when a user is on the ladder and stand at the base when making length adjustments
- Position ladder for a 1:4 lean ratio; that is, one foot out for every four feet of elevation
- Tie off ladders whenever possible at or near the top for added stability. Tie off at the bottom if there is difficulty in maintaining stability. When tying off or untying the top, or if the ladder cannot be tied off, someone on the ground should hold the ladder to ensure it remains stable.
- Extension ladder overlap requirements for the two sections:
 - Up to 36 feet in length, the overlap must be at least three feet
 - 36 to 48 feet in length, the overlap must be at least four feet
 - 48 to 60 feet in length, the overlap must be at least five feet
- Place ladders with both side rails supported unless equipped with a single support attachment
- Extend the ladder a minimum of three feet above the landing area when accessing roofs, landings, or open floor levels

2.4.2.4 Mobile Ladder Stands

- Only use on a level surface
- Always face the steps when ascending or descending
- Do not move the ladder when a person is using it

- Do not store material or equipment on the steps or platform
- Do not extend the height of a platform by adding an extension or object to the stand
- Do not use to access an elevated or other surface or work area

3 Forms

The following are forms required by these requirements:

- [Ladder Safety: Portable Ladder Pre-use Inspection Checklist](#) (SLAC-I-730-0A21J-001). Checklist of common inspection items, can be used to report problems, does not need to be kept

4 Recordkeeping

The following recordkeeping requirements apply for these requirements:

- None

5 References

[SLAC Environment, Safety, and Health Manual](#) (SLAC-I-720-0A29Z-001)

- [Chapter 15, “Ladder Safety”](#)
 - [Ladder Safety: Using Portable Ladders Safely](#) (SLAC-I-730-0A21T-013)

Other Documents

- American National Standards Institute (ANSI) Accredited Standards Committee (ASC) A14.1-2007, “Wood Safety Requirements” ([ANSI ASC A14.1-2007](#))