

U.S. Department of Labor Occupational Safety and Health Administration Directorate of Technical Support & Emergency Management Office of Science and Technology Assessment

## Working Safely with Mobile Ladder Stands

Safety and Health Information Bulletin

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## Introduction

Mobile ladder stands and platforms (i.e., mobile ladders) are used in businesses with warehouses, material storage facilities, merchandise distribution centers, and in home improvement stores.

Manufacturing and production facilities are more likely to customize mobile ladder design for specific work activities. Each year, preventable injuries and fatalities occur while using mobile ladders, usually when not operated in accordance with the manufacturers' instructions and industry safety standards. Safe mobile ladder design, training, and inspections, as part of an overall workplace safety and health program, will prevent mobile ladder incidents.



## **Mobile Ladder Design**

Mobile ladders are designed to provide a safe, elevated work surface that can also move horizontally across a

Figure 1: A mobile ladder stand platform used at a NASA facility. Source: www.wildeck.com/

floor on casters or wheels (see figure 1). Manual or automatic position locking mechanisms are a design element that ensures the mobile ladder does not move when a worker is standing on the elevated work surface. While their appearance and design can vary depending on specific workplace requirements, mobile ladders are generally classified into two main categories: mobile ladder stands and mobile ladder stand platforms.

- Mobile ladder stands are at a fixed height, self-supporting, and have stairs accessing a top step (i.e., a mobile staircase). These ladders are usually designed for one worker to use at a time while standing. For example, a worker might use a mobile ladder stand to access a small item stored on a shelf or to change a light bulb.
- Mobile ladder stand platforms provide larger elevated work surfaces (i.e., platforms) that allow multiply workers to use the ladder at the same time and space to stage materials and tools. These mobile ladders are generally used for manufacturing, assembly, and maintenance activities.

Preventing injuries and fatalities when using mobile ladders starts with choosing the right mobile ladder for the activity. The following are considerations to make when choosing an appropriate mobile ladder for the work task:

- Preventing overreach of the rail during the work activity.
- Align the platform size, height, and mobility of the ladder with the task duration, complexity, and/or mobility needs.
- Calculate and compare the maximum intended load (e.g., worker, tools, and materials to the mobile ladders' designed capabilities.

A mobile ladder's main structural components and use must meet specific requirements in <u>29 CFR</u> <u>1910.23(e)</u>: Mobile ladder stands and mobile ladder stand platforms and the applicable general requirements for ladders in 29 CFR 1910.23(b).

For additional information on mobile ladders, employers should reference appropriate industry standards such as ANSI A14.7.

## Training

Before using a mobile ladder, employers must train each employee in the proper care, inspection, storage, and use of mobile ladders, which may include:

- Position locking mechanisms (i.e., weight activated vs manual).
- Stair step, platform, handrail, and guardrail use.
- Structural component and design requirements.

Employers must retrain workers when they have reason to believe workers do not have the understanding and/or skill required to safely continue to use mobile ladders. Some situations requiring employers to retrain workers include, but are not limited to, when the worker:

- Performs the job or uses equipment in an unsafe manner;
- Receives an evaluation or information that the worker is not performing the job safely or the employer receives such information; **or**
- Is involved in an incident or near-miss.

These training requirements can be found in <u>29 CFR 1910.30: Training requirements</u>.

An on-line safety training video offered by the American Ladder Institute for Mobile Ladder Safety is available at: <a href="https://www.americanladderinstitute.org/page/LSTVideos.">www.americanladderinstitute.org/page/LSTVideos.</a>

## **Using Mobile Ladders**

Mobile ladder use includes two different functions; moving the mobile ladder from position to position, and as an immobilized elevated work surface. **Never** move the mobile ladder stand or platform while an employee is on it. (29 CFR 1910.23(e)(1)(viii))

When moving mobile ladders:

- Ensure the mobile ladder is unoccupied.
- Disengage locking mechanisms and verify the casters or wheels can move freely.
- Maintain awareness to avoid hitting objects, other elevated structures, and workers in the

area.

When working on mobile ladders:

- Position the mobile ladder on a smooth, flat surface.
- Engage the locking mechanisms to prevent the mobile ladder from moving before stepping onto the ladder.
- Ensure that steps and platforms of mobile ladder stands and platforms are slip resistant. (29 CFR 1910.23(e)(ii))
- Keep steps and platforms clean, dry, and free of spills and debris. (29 CFR 1910.22(a)(3))
- Ensure the mobile ladder is only used for the purposes for which they were designed (29 CFR 1910.23(b)(8):
  - Do not use additional ladders or other objects to increase the working height.
  - Do not overreach from the top step or platform.
  - Do not stand on handrails, mid-rails, or toeboard, if so equipped, to gain additional height.
  - Keep both feet firmly on a step or platform.

When using mobile ladders around electrical lines, additional precautions should be taken to prevent electrical shock. For information on hazardous energy sources, see <a href="https://www.osha.gov/SLTC/electrical">https://www.osha.gov/SLTC/electrical</a>.

#### **Inspecting Mobile Ladders**

Mobile ladder inspections, conducted by a competent person following the manufacturer's instructions, will identify structural defects before use. These inspections should be documented and each mobile ladder should display a sticker, placard, tag, or log with inspection dates. In addition to following the manufacturer's recommended schedule, inspections must be conducted before it is used each work shift. (29 CFR 1910.23(b)(9))

Per 29 CFR 1910.23(b)(10), if structural defects are found:

- Immediately tag "Dangerous: Do Not Use".
- Remove the mobile ladder from service until it is repaired or replaced.

## Mobile Ladders in the Workplace Safety and Health Program

Workplace safety and health programs should incorporate mobile ladders, when applicable, to clearly communicate policies for safe use. Specifically, safety and health programs should include:

- Where there mobile ladders are located in the workplace.
- How to access the manufacturers' instructions.
- Clarify roles and responsibilities mobile ladder use, inspection, training, and maintenance.
- Procedures for using each mobile ladder in specific worksite areas.
- Inspection expectations.
- Training program expectations.

#### Resources

29 CFR 1910.23: Ladders

ANSI A14.7: American National Standard for Mobile Ladder Stands and Mobile Ladder Stand Platforms

29 CFR 1910.30: Training Requirements

29 CFR 1910.145: Specifications for accident prevention signs and tags

29 CFR 1910 Subpart I, Personal protective equipment

OSHA Recommended Practices for Safety and Health Programs

## Additional Information

OSHA provides compliance assistance through a variety of programs. OSHA On-Site Consultation Program offers no-cost and confidential occupational safety and health services to small and medium-sized businesses in all 50 states, the District of Columbia and several U.S. territories, with priority given to high-hazard worksites. Consultants from local agencies or universities work with employers to identify workplace hazards and how to fix them, provide advice for compliance with OSHA standards, train and educate, and assist in establishing and improving safety and health programs. On-Site Consultation services are separate from OSHA enforcement efforts and do not result in penalties or citations. However, employers must agree to correct any serious and imminent danger hazards identified in a timely manner. To locate the OSHA On-Site Consultation Program nearest you, call 1-800-321-OSHA (6742) or visit <u>www.osha.gov/consultation</u>.

# Workers have the right to:

- Working conditions that do not pose a risk of serious harm.
- Receive information and training (in a language and vocabulary the worker understands) about workplace hazards, methods to prevent them, and the OSHA standards that apply to their workplace.
- Review records of work-related injuries and illnesses.
- File a complaint asking OSHA to inspect their workplace if they believe there is a serious hazard or that their employer is not following OSHA's rules. OSHA will keep all identities confidential.
- Exercise their rights under the law without retaliation, including reporting an injury or raising health and safety concerns with their employer or OSHA. If a worker has been retaliated against for using their rights, they must file a complaint with OSHA as soon as possible, but no later than 30 days.
- Exercise their rights under the Consumer Product Safety Improvement Act (CPSIA) without retaliation, including reporting a potentially unsafe or defective product to their employer, the federal government (i.e., the Consumer Product Safety Commission (CPSC)), or a state attorney general. A worker must file a CPSIA whistleblower complaint with OSHA no later than 180 days after an alleged violation occurs.

For additional information, see <u>OSHA's Workers'</u> page.

#### How to Contact OSHA

For more information, visit <u>www.osha.gov</u> or call OSHA at 1-800-321-OSHA (6742), TTY 1-877-889-5627.

This Safety and Health Information Bulletin is not a standard or regulation, and it creates no new legal obligations. The Bulletin is advisory in nature, informational in content, and is intended to assist employers in providing a safe and healthful workplace. Pursuant to the *Occupational Safety and Health Act (OSH Act)*, employers must comply with hazard-specific safety and health standards and regulations promulgated by OSHA or by a state with an OSHA-approved State Plan. In addition, pursuant to Section 5(a)(1), the General Duty Clause of the Act, employers must provide their employees with a workplace free from recognized hazards likely to cause death or serious physical harm. Employers can be cited for violating the General Duty Clause if there is a recognized hazard and they do not take reasonable steps to prevent or abate the hazard. However, failure to implement any recommendations in this Safety and Health Information Bulletin is not, in itself, a violation of the General Duty Clause. Citations can only be based on standards, regulations, and the General Duty Clause.

There are 28 OSHA-approved occupational safety and health State Plans. State Plans are required to have standards and enforcement programs that are at least as effective as federal OSHA's and may have different or more stringent standards. More information about State Plans is available at: <u>http://www.osha.gov/dcsp/osp/index.html</u>.