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Ladder Use and Inspections Policy

1 General

“Portable Ladder Use and Inspection” guidelines have been developed to establish recommendations for the safe use of portable ladders by University personnel.

Occupational Safety and Health Administration (OSHA) standards require that all ladders be used appropriately, and that personnel using ladders be trained in the proper use, limitations, and maintenance of ladders used.

The term portable ladder includes all step ladders, extension ladders, step stools, specialty type ladders (e.g.; trestle ladders; trolley and side rolling ladders) and other portable devices intended or constructed expressly for the purposes of providing access to spaces or materials.

2 Regulatory Guidance

- Occupational Safety and Health Administration (OSHA) 29 CFR:
  - 1910.23
  - 1926.1053
  - 1926.1060
- ANSI A14.1, A14.2, and A14.5

3 Responsibilities

Safety Management
- Assist departments in ladder selection, upon request.
- Assist departments in developing ladder training via train the trainer.
- Provide basic on-line ladder operation and inspection guides.

Department Chairs or Directors
- Provide the appropriate ladders where necessary.
- Ensure that periodic inspections of all ladders are performed when necessary.

Supervisors
- Provide the appropriate ladders for employee use.
- Provide and document training for ladder users.
- Ensure that ladders are inspected prior to each use and that unsafe ladders are removed from service and labeled “DO NOT USE!”
- Ensure that ladders that are removed from service and are not going to be repaired are completely destroyed.
Individual

- Complete ladder safety training, as required.
- Follow all required ladder inspection, use, and manufacturer labeling requirements.
- Do not use unsafe ladders and immediately report any unsafe and unlabeled ladders to your supervisor for removal from service.

4 Requirements

4.1 General

- Ladders must be inspected by a competent person for visible defects on a periodic basis and after any occurrence that could affect safe use. (Applicable to OSHA 1926 covered activities only)
- All employees using ladders must conduct a visual pre-use inspection (see section 4.4).
- Ladders must be appropriate for the task and properly maintained to provide access to places where employees perform tasks.
- Use ladders equipped with nonconductive side rails (e.g., fiberglass ladders) if the worker or the ladder could contact exposed energized electrical equipment.
- Never use a metal ladder near any electrical conductor or electrified equipment.
- The following apply to all ladders:
  - Rungs/steps must be free of grease, oil, or any other substance that would make them slippery.
  - Ladders are not be painted with an opaque finish or coated with any material that might hide defects.
  - Ladders/step stools must not carry loads beyond written rating.
  - Only one person at a time may use or work from a single ladder, unless the ladder is specifically designed for more than one climber. (Such as a trestle ladder)
  - Use ladders only for their designed purpose.
  - Keep areas around the top and bottom of ladders free of debris and clutter.
  - Face the ladder when climbing up or down.
  - Carry items up and down ladders using a pouch, holster, or tool belt. Small, non-bulky items, may be hand carried as long as the items do not impede the ability to maintain full control while climbing or descending the ladder. Ladder users should focus their attention on climbing up and/or down a ladder for a safe ascent or descent. Large or heavy items should be pulled up or lowered with a hand line or rope specifically for that purpose.
  - Ladder users shall maintain three points of contact while ascending and descending. For example, two feet and one hand, or two hands and one foot should be in contact with the ladder.
  - Never stand on the top two steps of any ladder unless designed to do so.
  - Keep your body centered within the frame of the ladder. Do not overextend your reach while on the ladder.
  - Ensure manufacturer’s labels are intact and legible. Replace as needed.
    - Always follow manufacturer’s specifications and stickers.
4.2 **Ladder Placement**

Place ladders on a level and firm footing. Ensure ladder is rigid, stable, and secure to prevent accidental movement.

Do No place ladders on boxes, loose bricks, or other loose packing to create stability or to attempt to gain extra height.

Avoid placing ladders in front of a door opening unless the door is fastened open, locked, or guarded.

Setting ladders requires proper care and angle. Set ladder (1) foot away from the wall for every four (4) feet that the ladder rises. For example, if the ladder touches the wall at 12 feet above the ground; angle the ladder so that the base is three (3) feet from the wall.

If accessing an elevated location, ladders must extend at least three (3) feet above any landing place or roof unless grab railings are provided. Fall protection may be required.

Climb down to position or reposition the ladder. Avoid moving, shifting, extending or walking a ladder while you or someone else is standing on it.

4.3 **Securing the Ladder**

Ladders should be securely fixed at the top and bottom so that they cannot move.

Step ladders must have spreaders fully engaged.

Do not use ladders on slippery surfaces unless secured or provided with slip-resistant feet to prevent accidental movement. Non-slip feet are not a substitute for securing a ladder on slippery surfaces.

4.4 **Pre-Use Visual Inspections**

Ladders are inspected before initial use in each work shift, and more frequently as necessary, to identify any visible defects that could cause employee injury. The inspection shall include:

- Locating label on ladder for commercial use and a certified duty load rating
- Ensuring side rails, braces, steps, rungs are free from splinters, cracks, dents, and bends
- Verifying extension ladder ropes are not frayed, pulleys work smoothly and rung locks operate correctly.
- Ensuring ladder is not painted or covered with anything that could hide defects.
- Checking for decay, damage, loose nails, screws, bolts, pin, faulty welds, cracks or sheared rivets.
- Checking the joints between the rungs and the side rails for tightness. Joints are loose if the rungs can be moved by hand.
- Verifying rungs or steps are in place.
• Ensuring metal ladder rungs/steps are corrugated or knurled to prevent slipping.
• Ensuring ladder rungs/steps are free of grease, oil, or any other substance that would make them slippery.
• Verifying stepladders have a metal spreader or locking device to securely hold the front and back sections in an open position. Ensuring spreader does not have any sharp objects protruding from it.
• Ensuring all moveable parts operate freely without binding.
• Checking to ensure that the feet are in good condition and not broken.

Ladders with structural defects or needing repairs must immediately be marked defective or tagged with "Do Not Use" or similar language and withdrawn from service until repaired. Repairs must be carried out by a competent person to manufacturer standards. Where repair is not completed the ladder must be destroyed.

4.4.1 Periodic Inspections (OSHA 29 CFR 1926 covered activities)

Ladders shall be inspected by a competent person for visible defects on a periodic basis and after any occurrence that could affect its safe use.

A Periodic Portable Ladder Inspection Checklist form is available on the Safety Management Documents webpage.

4.5 Storage

All ladders shall be safely stored.

4.6 Training

Training should be provided by each department to ensure that those University personnel using ladders understand the purpose, function, and limitations of ladders to be used.

Training is required for each employee using ladders for tasks that fall under the OSHA construction standard (29 CFR 1926) as necessary. This applies to ladders used in construction, alteration, repair, painting, decorating and demolition of worksites covered by OSHA’s construction safety and health standard. Training must be conducted by a competent person, as appropriate, and include the following:

• The nature of fall hazards in the work area;
• When the use of fall protection applies;
• The proper construction, use, placement, and care in handling of all stairways and ladders;
• The maximum intended load-carrying capacities of ladders; and
• The regulatory standards that apply (e.g., 29 CFR 1926.1053).

Users should be familiar with information in this document. Retraining must be provided for each employee when involved in a related incident, or observed not following requirements.
5  Definitions

**Competent Person:** An individual, who by way of training and/or experience is knowledgeable of applicable standards, is capable of identifying workplace hazards relating to the specific operation, is designated by the employer, and has authority to take appropriate actions.

**Extension ladder:** A non-self-supporting portable ladder adjustable in length. It consists of two or more sections traveling in guides or brackets so arranged as to permit length adjustment. Its size is designated by the sum of the lengths of the sections measured along the side rails.

**Maximum intended load:** The total load of all employees, equipment, tools, materials, transmitted loads, and other loads anticipated to be applied to a ladder component at any one time.

**Portable ladder:** A ladder that can be readily moved or carried.

**Side-rolling ladder:** A semi-fixed ladder, nonadjustable in length, supported by attachments to a guide rail, which is generally fastened to shelving, the plane of the ladder being also its plane of motion.

**Step ladder:** A step ladder 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 (ladder type):** 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 to be climbed on the ladder top cap as well as all steps. The side rails may continue above the top cap.

**Trolley ladder:** A semi-fixed ladder, nonadjustable in length, supported by attachments to an overhead track, the plane of the ladder being at right angles to the plane of motion.

6  For Additional Information

Contact your Campus / Department Safety Coordinator or UMS Safety Management at 207-581-4055.

7  Document history

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