

Ladder Safety Policy

11-21-2014 – Last Revision

1.0 Intent:

This intent of the Ladder Safety Program is to complement the University's Fall Protection Program by setting proper procedures that all employees must follow when working with ladders and stairs in order to prevent accidents from occurring in the worksite.

2.0 Scope:

This program applies to all employees of the University at Albany's Main campus, Downtown campus and East campus.

3.0 Policy:

It is the policy of the University of Albany to take all necessary measures to prevent injuries to employees and students while using ladders. This policy has been established to reduce the risk of incident or injury to University at Albany employees who work with ladders. It provides the minimum requirements to ensure that the ladder safety program is successful. This policy has been developed in accordance with the following standards: *OSHA Standard 29CFR 1910.25*

4.0 Responsibilities:

4.1 Environmental Health and Safety (EHS) Department

- Develop and coordinate implementation of the Ladder Safety Program
- Provide training for the care and use of ladders
- Maintain training records
- Conduct periodic inspections to ensure the continued effectiveness of the program

4.2 Department Supervisor

- Responsible to ensure ladder safety program is being followed by all employees

- Coordinate training with the office of Environmental Health and Safety
- Ensure that all affected employees using ladders have been trained
- Enforce the care, use and storage of ladders as outlined in the program

4.3 Employees

- Comply with the Procedures outlined in the Ladder Safety Program
- Thoroughly inspect and maintain ladders before and after use
- Properly select, use and store ladders in accordance with the procedures in this manual

5.0 Types of Portable ladders

Ladders are generally available in three material compositions: wood, fiberglass, and metal.

Wood Ladders:

Wood Ladders are electrically non-conductive and are the best natural insulator against heat. They can be electrically conductive if wet. Wood ladders are heavier than metal. They are susceptible to drying and rotting and need a clear finish to protect them.

Fiberglass Ladders:

Fiberglass ladders are strong, lightweight, and electrically non-conductive. They do not dry out and split like wood. They are slow to conduct heat, so they are able to withstand heat exposure without losing strength. They are heavier than wood or metal and are not available in longer extension ladders. Fiberglass may chip or crack under severe impact. When overloaded, fiberglass does not bend, it cracks and fails.

Metal Ladders:

Metal ladders are very strong and lightweight. They dent, but do not chip or crack when subjected to severe impact. They do not require a protective varnish for protection. They do conduct heat rapidly. If they are exposed to heat, they will lose their tensile strength. They must not be used when working on or near electrical wires or when working around energy sources. Metal ladders must be labeled with a DANGER warning sticker indicating electrocution hazard.

Stepladder: Self-supporting portable ladder, non-adjustable in length, having flat steps and a hinged back.

Single Ladder: A non-self-supporting portable ladder, nonadjustable in length, consisting of one section.

Extension Ladder: A non-self-supporting portable ladder adjustable in length, consisting of multiple sections.

The American National Standards Institute (ANSI) requires that a duty rating sticker be placed on the side of the ladder. When selecting a ladder, be sure to use the proper duty rating to carry the combined weight of the user and material. The ladder duty ratings are as follows:

- **Type 1A** (Extra Heavy Duty Industrial): 3-20 feet for heaving duty, such as utilities, contractors, and industrial use. Load capacity not to exceed 300 pounds.
- **Type I** (Industrial): 3-20 feet for heavy duty, such as utilities, contractors, and industrial use. Load capacity not to exceed 250 pounds.
- **Type II** (Commercial): 3-12 feet for medium duty, such as painters, offices, and light industrial use. Load capacity not to exceed 225 pounds.
- **Type III** (Household): 3-6 feet for light duty, such as light household use. Load capacity not to exceed 200 pounds.

6.0 Ladder Care and Maintenance

Ladders shall be maintained in good condition at all times by ensuring the following:

1. The joint between the steps and side rails shall be tight.
2. All hardware and fittings shall be securely attached.
3. Movable parts shall operate freely without binding or excessive play.
4. Locks, wheels, pulleys, and other bearings shall be frequently lubricated;
5. Frayed or badly worn rope shall be replaced.
6. Safety feet and other auxiliary equipment shall be kept in good condition.

7. Ladders with defects shall be taken out of service and tagged as
“Dangerous Do Not Use”
8. Rungs shall be kept free of grease and oil.
9. Wood ladders shall not be painted with an opaque finish or coated with any material that may hide defects. Use only clear varnish.

7.0 Ladder Storage

- When not in use, ladders shall be stored in a designated location out of direct sunlight .
- Do not expose ladders to harmful elements that may cause decay/damage. Never store.
- materials on a ladder. Straight and extension ladders should be stored in storage racks.
- Be sure that ladders are secured when in transit.

8.0 Ladder Set-up

Prior to climbing a ladder, it shall be set up according to the following:

- Position the ladder so that the side rails extend at least 3 feet above the landing.
- Extension ladders shall be extended from the ground only.
- Portable ladders shall be used so that the base is a distance from the vertical wall equal to one-fourth the working length of the ladder.
- The ladder base must be placed with secure footing.
- Ladders shall not be used in a horizontal position as a platform, a runway, or scaffold.
- Ladders shall not be placed in front of doors opening toward the ladder unless the door is blocked upon, locked, or guarded.
- Ladders shall not be placed on boxes, barrels, or other unstable bases to obtain additional height.

- The area around the ladders must remain clear from debris, equipment, etc.
- The minimum overlap for the two-sections on extension ladders shall be:

<u>Size of ladder (feet)</u>	<u>overlap (feet)</u>
Up to and including 36 feet	3'
Over 36 up to and including 48	4'
Over 48 up to and including 60	5'

9.0 Never place a ladder near electrical wiring or against operational piping (chemical, gas, sprinkler systems) where damage may occur.

10.0 Climbing and Standing

When climbing or standing on a ladder, the following safety precautions shall be followed:

- Make sure shoes are free of mud, soil, or anything slippery.
- When ascending or descending, the user must face the ladder.
- Use at least one hand to grasp the ladder when climbing. Maintain at least three points of contact with the ladder (two feet and one hand or two hands and one foot).
- The top two steps of a stepladder shall not be used for standing. The highest working height shall be clearly marked.
- Do not stand on the pail shelf of a stepladder.
- Do not straddle the front and back of a step ladder.
- Never stand on the top two rungs of a straight or extension ladder.
- When working to the side of a ladder, the centerline of the body must be maintained between the side rails.
- No more than one person shall be on a ladder at a time unless the ladder is manufactured to support an additional person.
- Do not move, shift, or extend ladders while in use.

11.0 Training Requirements

All employees shall be trained prior to portable ladder use, to recognize hazards and procedures to minimize hazards. Employees shall be trained in the following:

- The recognition of possible hazards associated with ladder use, maintenance, and safety precautions.
- The proper use and placement of ladders.
- The maximum intended load capacities of ladders used.

Employees shall be retrained as necessary to maintain their understanding and knowledge on the safe use of ladders.