



Ladder Safety Policy

GENERAL

The UNCW Environmental Health & Safety Department (EH&S) is authorized by UNCW Policy 05.600 (http://uncw.edu/policies/documents/05_600_EHandSPolicy_5Feb2010.pdf) to develop and manage comprehensive environmental, health and safety programs. Additionally, they are tasked to identify and address regulatory requirements. In that spirit, this Ladder Safety Policy has been developed to protect employees by ensuring that all employees understand the safe ladder use and practice before employees perform servicing and maintenance activities. This policy is intended to meet the Occupational Safety and Health Requirements for General Industry outlined in 29 CFR 1910 Subpart D, Ladders.

SCOPE

This policy applies to all university employees regardless of status or type of employment. It may be used as minimum guidelines for contractors and/or vendors that are expected to maintain their own safety program.

APPLICATION

This written policy outlines responsibilities, training, specific procedures and inspections with regard to Ladder Safety.

DEFINITIONS

Controlled Access Zone: An area in which certain work may take place without the use of guardrail systems, personal fall arrest systems, or safety nets. Access to the zone is controlled.

Guardrail System: A barrier erected to prevent employees from falling to lower levels.

Low Slope Roof: A roof having a slope of less than or equal to 4 in 12 (vertical to horizontal).

Lower Level: Those areas or surfaces to which a worker can fall, including but not limited to ground levels, floors, excavations, etc.

Personal Fall Arrest System: A system used to arrest an employee in a fall from a working level. This system consists of an anchorage, connectors, and a body harness.

Roof: The exterior surface on the top of a building.

Roofing: The hoisting, storage, application and removal of roofing materials and equipment.

Safety Monitoring System: A safety system in which a competent person is responsible for recognizing and warning workers of fall hazards.

Safety Net System: A net installed under the walking/working surface to catch employee when falling.

Unprotected sides and edges: Any surface, whether horizontal or vertical on which a person works or walks, including, but not limited to, floors, roofs, ramps, bridges, runways, but not including ladders.

RESPONSIBILITIES

Each Department shall be responsible for the implementation of Ladder Safety procedures. Employees shall have training in understanding the significance of implementing the procedures. Employees will use the Ladder Safety procedures when performing servicing or maintenance activities, etc. Department Supervisors shall be responsible for training record keeping and record retention.

TRAINING

The department shall provide training so employees understand the purpose and function of the program (knowledge, skills, application, use, removal)

Retraining:

Retraining shall reestablish proficiency and introduce new or revised control methods

1. There shall be retraining with any change in job assignments, change in machines, equipment or process that presents a new hazard or a change in procedures
2. Retrain when inspection reveals a need, or whenever the employer sees a need

SPECIFIC REQUIREMENTS

Portable Ladder Procedure

1. Place the ladder base at a 1:4 ratio from the vertical (horizontal/vertical). For every 4 feet of working length the base of the ladder should be 1 foot out from the top support.
2. Extend ladder 3 feet above the top support point.
3. Use ladders only in a vertical position. Ladders are not a substitute for a scaffold or a runway between two elevated surfaces.
4. Keep ladder directly off of window panes or sashes.
5. Keep ladders away from front of a door that opens toward the ladder unless the door is locked, blocked, or guarded.
6. Place a portable ladder so both side rails have secure footing. Provide solid footing on soft ground to prevent the ladder from sinking.
7. Place the ladder feet on a substantial and level base not on movable objects.
8. Lean ladder against secured backing.
9. Securely lash or otherwise fasten ladder to prevent slipping when using a ladder for access to high places.
10. Secure bottom and top of ladder to prevent displacement when using ladder for access to a scaffold.
11. Keep ladder away from electrical wiring.
12. One person at a time will be on a ladder.

Fixed Ladders

Fixed ladders cannot be moved. Provide access to specific elevated locations. All fixed ladders over 20 feet in length must have a cage or well.

Other Characteristics

1. Pitch of 75-90 degrees
2. Designed to bear a load of 200 pounds
3. $\frac{3}{4}$ inch rung diameter
4. Rungs 16 inches wide
5. Rungs spaced no more than 12 inches apart
6. Hand or side rails extending 3 $\frac{1}{2}$ feet above the landing
7. Minimum clearance of 2 $\frac{1}{2}$ feet on the climbing side of ladders with 90 degree pitch and 3 feet for a 75 degree pitch
8. Clear width of 15 inches on each side of the center line of ladder
9. 7 inch clearance in back of ladder to assure adequate footing
10. Painted, if metal or appropriately treated to prevent deterioration if conditions indicate

Ascending/Descending Ladder

1. Both hands must be used on ladders. Raise/lower needed material by mechanical means.
2. Keep the center of gravity centered as much as possible between the hands and the foot that is in contact with the ladder.
3. Always face the ladder going up or coming down.
4. Never slide down a ladder.
5. Make sure shoe bottoms are not greasy, muddy or slippery before you climb.
6. Do not climb higher than the third rung from the top on extension or straight ladders or the second tread from the top on step ladders.

Safe Practices

1. Make sure step ladder is fully opened and the metal spreader locked before you start to climb ladder.
2. Keep ladders clean and grease free.
3. Do not use ladders during a strong wind except in emergency and only then when tied securely.
4. Do not leave placed ladders unattended.
5. Avoid using metal ladders around energized electrical circuits or equipment.

INSPECTION

Reviewed October 2016

1. Make periodic ladder inspections for structural integrity.
2. Conduct quarterly inspections as a minimum. Record all inspections made.
3. Remove defective ladders from service when noted during inspection. Tag it with "DANGEROUS - DO NOT USE". Do not use until ladder is repaired.
4. Dispose of any ladder that cannot be repaired.