## **LADDERS**

The purpose and scope of this policy is to put forth the regulations regarding ladder safety procedures and training for the employees of the Facilities Management Group.

OSHA regulation CFR 1926, 1950-1960 Subpart X contains specific information on these rules. All employees of the Facilities Management Group who might use a ladder during the course of work should be familiar with this policy. This policy covers all types of ladders, including step, extension, and fixed ladders. Ladder users must be able to recognize and avoid ladder hazards and be aware of safe practices in setting up, storing, moving and working from this equipment.

### ASSIGNMENT OF RESPONSIBILITIES

The Supervisors shall be responsible for the following:

- 1. To ensure that all employees abide by and adhere to the guidelines and requirements outlined in this ladder policy.
- 2. To ensure that all ladders in their respective departments are maintained in good working condition.
- 3. To ensure that all employees attend all required training.

The Occupational Safety Coordinator will be responsible for the following:

- 1. To ensure that all employees are properly trained in ladder safety and will record all training sessions.
- 2. To ensure that all ladders that are defective are taken out of service and properly disposed of
- 3. To ensure that all employees are aware and have been trained in this ladder safety policy.

The employee will be responsible for the following:

- 1. To ensure that they adhere to all guidelines and regulations outlined in this ladder safety policy.
- 2. To ensure that before each use, they perform a ladder inspection to ensure no parts are defective or unsafe.
- 3. If a ladder is found to be defective or unsafe, the employee will use a "DO NOT OPERATE" tag and remove the ladder from service. These tags can be obtained from the Safety Office.

### LADDER CATEGORIES

- 1. Type IAA-375 pounds special duty
- 2. Type IA-300 pounds extra heavy duty
- 3. Type I-250 pounds, heavy duty
- 4. Type II-225 pounds, medium duty
- 5. Type III-200 pounds, light duty



#### LADDER PRE-CAUTIONS & SAFETY

- 1. Ladders shall extend 36 inches above the landing.
- 2. Extension and job-built ladders shall be secured to prevent movement or falling.
- 3. Manufactured ladders shall be Class I or Class IA with properly working feet.
- 4. The slope of the ladder from the base of the support shall be (1) foot for every 4 feet of ladder length.
- 5. All ladders shall be set on a firm base to prevent shifting and tipping.
- 6. Step ladders shall not be used as a leaning ladder.
- 7. Employees shall not work off the top two steps of a stepladder.
- 8. Personnel shall have both hands free of tools, materials, or equipment, while climbing and descending ladders.
- 9. Personnel shall face the ladder when climbing and descending.
- 10. All employees must have ladder training before being allowed to use a ladder.
- 11. All employees who use ladders must inspect them for defects or possible hazards before the ladders are used.
- 12. Ladders with loose parts or faulty rungs should be taken out of service immediately.
- 13. Ladders that are taken out of service should be tagged "Defective" and removed from the work area
- 14. Whenever possible have someone within shouting distance while on a ladder.
- 15. Ladders with broken/damaged components or missing/illegible manufacturer's instructional labels must be removed from service immediately.
- 16. Metal and wooden ladders are prohibited unless approved by the Occupational Safety Coordinator.
- 17. Personal fall arrest systems (fall protection) is required whenever working from a ladder 6 feet or more above a lower level. Employees in transition on a ladder do not require tie-off.
- 18. Three-point contact must be maintained at all times.
- 19. Never carry tools or materials in your hands, use a rope and/or approved bucket to raise tools and materials.
- 20. Work from the top two steps of stepladders is prohibited.
- 21. Working from a ladder backwards is prohibited due to stability issues.
- 22. Ladders must be either laid down on their sides or secured by straps, ropes, cords, chains, or other restraint devices to prevent falling or tipping over.
- 23. All manufacturer's labels must be visible and legible.
- 24. Paint or any other product that would cover labels or defects should not be used on a ladder

# TYPES OF LADDERS & THEIR REQUIREMENTS

Fixed ladders are any ladder that cannot be easily moved or carried, and may be an integral part of a structure.

The following are requirements pertaining to fixed ladders:

1. Fixed ladders must be secured to the object they are attached to.

- 2. Fixed ladders over 20 feet must have a safety cage surrounding the ladder.
- 3. The safety cage should have 15" clearance to all points from the center.
- 4. Defects in fixed ladders should be repaired as soon as possible.
- 5. When a defect is not repairable the ladder must be taken out of service.

A point to remember is that a fixed ladder, with a length of more than 20 feet to a maximum unbroken length of 30 feet shall be equipped with cages or a ladder safety device. A "cage' is a guard that is fastened to the side rails of the fixed ladder or to the structure encircling the climbing space of the ladder for the safety of the person who must climb the ladder. The following guidelines pertain to fixed ladders with cages:

- 1. Cages shall extend a minimum of 42 inches above the top of a landing, unless other acceptable protection is provided.
- 2. Cages shall extend down the ladder to a point not less than 7 feet or more than 8 feet above the base of the ladder.

The following are requirements pertaining to extension ladders:

- 1. Extension ladders must extend three-feet (36") above the supporting object when accessing elevated work areas and be tied off to prevent displacement.
- 2. When extension ladders cannot be tied-off, another employee will be required to secure the base of the ladder.
- 3. Lay the ladder on the ground when it is collapsed.
- 4. Have someone foot the ladder or make sure it is braced against something at all times to ensure tipping does not occur.
- 5. Pick up the ladder and walk it to an upright position, making sure it will not be obstructed by trees or wires.
- 6. Slide the bottom of the ladder outwards to the proper angle and set the feet correctly.
- 7. Then extend the ladder by pulling the extension line.
- 8. Make sure the rungs on the upper half of the ladder are properly secured by the locking mechanism.
- 9. If possible, tie the ladder off or have someone steady the ladder as you climb it.
- 10. Extension ladders will be used at a 4 to 1 angle / 75-degrees (Horizontal distances from support to the foot of the ladder ¼ the working length of the ladder).

The chief hazard when using a ladder is falling. A poorly designed, maintained, or improperly used ladder may collapse under the load placed upon it and cause the employee to fall.

The following guidelines should be followed when using portable (step) ladders:

1. Portable stepladders longer than 20 feet shall not be used.

- 2. Stepladders shall be equipped with a metal spreader of locking device of sufficient size and strength to securely hold the front and back sections in the open position.
- 3. Single ladders longer than 30 feet shall not be used.
- 4. Stepladders shall not be used as an extension ladder under ANY circumstances.

#### PROPER USE & CARE OF LADDERS

- 1. Never use metal ladders near exposed electrical wires.
- 2. Place warning signs or setup barriers around a ladder before use.
- 3. Do not move a ladder while someone is on it.
- 4. Never use a ladder when under the influence of alcohol or prescription medications.
- 5. Do not leave tools or materials on top of ladders.
- 6. Only one person should be on a ladder at a time.
- 7. Do not use a ladder on a scaffold.
- 8. Do not try to rock a ladder to move it.
- 9. Store ladders where they will not be exposed to the elements.
- 10. Make sure ladders are properly secured when transported.
- 11. Do not paint ladders. Painting could hide potentially dangerous defects.
- 12. Remove defective ladders from service by placing a "DO NOT USE" tag on the ladder. These tags can be obtained from the Safety Office.
- 13. Always inspect a ladder before use.

### **SAFE LADDER SETUP**

- 1. All ladders must be placed on firm ground.
- 2. Do not set ladders on boxes, blocks or other objects that might move.
- 3. Do not lean or reach out while standing on ladders.
- 4. Secure ladders whenever a danger of slippage might occur.
- 5. Do not use ladders in high wind or during inclement weather conditions.
- 6. Never set up ladders in front of or around doors, unless the door is posted or locked.
- 7. Do not sit on ladders.
- 8. Use safety shoes or other rubber sole shoes when climbing a ladder.

## REQUIRED OVERLAP FOR LENGTH OF LADDER

- 1. Up to 36'- 3 feet overlap
- 2. Up to 36'-48'- 4 feet overlap
- 3. Over 48'-60'- 5 feet overlap

ARKANSAS TECH UNIVERSITY HEALTH & SAFETY POLICY	
	<b>6  </b> Page