



Policy and Procedure: Aerial Work Platforms and Scissor Lifts

Purpose:

To ensure the safety of all personnel operating/utilizing an aerial work platform and/or scissor lift.

Policy:

All personnel operating/utilizing an aerial work platform and/or scissor lift must:

- Adhere to all applicable manufacturer's guidelines/requirements;
- Adhere to all applicable Occupational Safety and Health Administration (OSHA) guidelines/requirements; and
- Adhere to all applicable University of Wyoming Athletic Department procedures (see below)

OSHA Requirements

Scissor Lifts

- Scissor lifts that have extendable platforms (or extend beyond the equipment's wheelbase) are not covered by the aerial lift OSHA requirements (1926.453). See attached OSHA interpretation letter.
- However, since scissor lifts are mobile, they do meet the definition of scaffold (1926.451) the specific requirements for mobile scaffolds in the scaffold standard (1926.452(w) must be met. Please refer to attached regulations for details. In brief:
 1. Must be braced by cross, horizontal or diagonal braces.
 2. Must be plumb, level, and squared.
 3. Scissor lifts with wheels should be locked with positive wheel and/or wheel and swivel locks to prevent movement of the lift while it is use in a stationary manner.
 4. Power systems used to propel the scissor lift shall be designed for such use.
 5. Must be stabilized to prevent tipping during movement.
 6. Employees shall not be allowed to ride in the scissor lift unless the following conditions are met:
 - a. The surface on which the lift is being moved is within 3 degrees of level and free of pits, holes, and obstructions.
 - b. The height to base width ratio of the lift during movement is two to one or less, unless the lift is designed and constructed to meet or exceed national recognized stability test requirements.
 - c. Outrigger frames, when used, are installed on both sides of the scaffold.
 - d. When power systems are used the propelling force is applied directly to the wheels and does not produce a speed in excess of 0.3 mps.
 7. No employee is on any part of the scaffold which extends outward beyond the wheels, casters, or other supports.
 8. Platforms shall not extend outward beyond the base supports of the scaffold unless outrigger frames or equivalent devices are used to ensure stability.

9. When leveling the scissor lift is necessary, screw jacks or equivalent means shall be used.
10. Caster stems and wheel stems shall be pinned or otherwise secured in lift legs or adjustment screws.
11. Before a lift is moved, each employee on the lift shall be made aware of the move.

Aerial Lifts

- Must conform to ANSIA92.2-1969 in design and construction.
- Includes extensible boom platforms, aerial ladders, articulating boom platforms, and vertical towers.
- Any lift that is “field modified” for use other than that intended by the manufacturer must have been certified in writing by the manufacturer or by equivalent entity.
- Aerial ladders shall be secured in the lower traveling position by locking device on top of the truck cab, and the manually operated device at the base of the ladder before the truck is moved for highway travel.
- For extensible and articulating boom platforms, lift controls shall be tested each day prior to use to ensure they are working properly.
- Only authorized persons shall operate an aerial lift.
- Belting off to an adjacent pole, structure, or equipment while working from an aerial lift shall not be permitted.
- Employees shall always stand firmly on the floor of the basket and shall not sit or climb on the edge of the basket or use planks, ladders, or other devices for a work position.
- A body belt shall be worn and a lanyard attached to the boom or basket when working from an aerial lift. (As of January 1, 1998, Subpart M stipulated body belts are not acceptable part of a personal fall arrest system. The use of a body belt in a tethering system or in a restraint system is acceptable).
- Boom and basket limit specified by the manufacturer shall not be exceeded.
- The brakes shall be set and when outriggers are used, they shall be positioned on pads or a solid surface. Wheel chocks shall be installed before using an aerial lift on an incline provided it is safe to do so.
- The aerial truck shall not be moved when the boom is elevated in a working position with men in the basket, except for equipment which is specifically designed for this type of operation.
- Articulating boom and extensible boom platforms (i.e., personnel carriers) shall have both platform (upper) and lower controls. Controls must be clearly marked and the lower controls shall not be operated unless permission is obtained from the employee in the lift except in an emergency.
- Climbers shall not be worn while performing work from an aerial lift.
- The insulated portion of an aerial lift shall not be altered in any manner that will reduce the insulating value.
- Before moving an aerial lift for travel, the boom(s) shall be inspected to see that it is properly cradled and outriggers are in stowed position.
- All electrical tests shall conform to ANSI A92.2-1969
- Bursting safety factor: the provisions of ANSI standard A92.2-1969 section 4.9 shall apply to all critical hydraulic and pneumatic components. Critical components are those in which failure would result in a free fall or rotation of the boom. All noncritical components shall have a bursting safety factor of at least 2:1.

OSHA Training Requirements 1910.67 (c)(2)(ii)

- Only trained persons shall operate an aerial lift.
- Only authorized persons shall operate an aerial lift.
- Employers shall provide training in the various precautions, safe work practices, and use of personal protective equipment needed to perform the job.
- The employer shall certify and maintain records that employees have been trained.
- Formal training shall consist of classroom type training and/or on the-job training.
- Proficiency testing of classroom and "hands-on" skills is required. OSHA 1910.67 (b)(1) and 1926.453 (a)(1) Incorporate ANSI A92.2 by reference

Procedures

- All platform occupants will be provided, at minimum, a cell phone or departmental radio (preferably both) to ensure constant communication with ground level/event management personnel.
- When operating/utilizing an aerial work platform and/or scissor lift outside, all platform occupants will be provided an instrument to gauge wind speed. Should wind speed exceed the manufacturer's guidelines, the occupant must be immediately lowered to ground level and exit the platform. Please note that Sports Medicine personnel on-site will have a similar instrument used for gauging wind speed and tracking weather (e.g., lightning, etc). However, due to wind speeds varying at different heights, departmental guidelines mandate platform occupants also have the ability to track it.
- If a platform occupant feels unsafe at any time and/or for any reason, he/she has the sole authority to be lowered to the ground level and exit the platform without fear of repercussion/reprimand.