



## Aerial Lift Safety

### **What is an Aerial Lift and where do I find specific OSHA Standards?**

Aerial lifts are vehicle-mounted, boom-supported aerial platforms and includes such equipment such as cherry pickers or bucket trucks, extensible boom platforms, aerial ladders, articulating boom platforms, vertical towers, and any combination of any such device. Specific OSHA standards for Aerial Lifts can be found in CFR 29 OSHA 1910 under subpart F-“Powered Platforms, Man-lifts, and Vehicle-Mounted Work Platforms 1910.67 in addition to CFR 29 OSHA 1926 subpart L “Scaffolds/Aerial Lifts” 1926.453. Under the 1926 OSHA Standards for Construction they are found under the Scaffolds Subpart, however Aerial lifts have their own set of specific standards. Some of the major advantages in using Aerial lifts are that they are mobile and can allow for access to elevated areas that may be limited or restricted with the use of ladders or most types of scaffolding. Aerial lifts may be powered or operated manually, and are considered to be aerial lifts whether or not they can rotate around a primarily vertical axis.

### **Workplace Hazards**

While aerial lifts can be very beneficial and effective in providing access to elevated work areas many workers are injured or killed on aerial lifts each year. The major causes of fatalities and serious injuries are falls, electrocutions, and collapses or tip-overs and most can be prevented through safe work practices, proper training, and appropriate equipment maintenance and inspections.

### **Training**

Only employees that have been properly trained by a person qualified in the subject matter should be allowed to operate or work from aerial lifts. Training should include the recognition and understanding the nature of electrical hazards and how to control such hazards; fall hazards and falling object hazards in work areas; correct procedures for controlling electrical hazards for erection and disassembling the fall protection systems and falling object protection systems being used; proper material handling during aerial lift operations including maximum intended load and load carrying capacities; and any other pertinent requirements of this subpart. Employees involved in erecting, assembling, moving, operating, repairing, maintenance, or inspecting of scaffolding or aerial lifts shall be trained by a competent person to recognize any hazards associated with the work in question and how to control such hazards. Employees should be retrained if they are involved in any accident during aerial lift use, if new workplace hazards are identified, if a different type of aerial lift is used or workplace conditions change, or if employees are observed operating the lift in an unsafe manner.

### **Preventative Maintenance and Inspections**

OSHA requires that aerial lifts, rigging, and all fall protection components be inspected for visible defects by a competent person before each work shift and after any occurrence which could affect its structural integrity. Lift controls shall be tested each day prior to use to determine that controls are in safe working condition. Any lift or equipment not found to be in safe working condition shall be removed from service until repaired by an authorized and qualified person. Maintain and operate lifts according to manufacturer’s instructions.

### Safe Operation

- Always first inspect the entire work site and areas where the lift will be operated to identify existing or potential hazards such as excavations, electrical power lines or overhead hazards, workers or others in the areas and take appropriate precautions to adequately control any identified hazards.
- Never move the equipment with workers in an elevated platform unless it is permitted by the manufacturer.
- Use a body harness or restraining belt with a lanyard attached to the boom or basket to prevent the worker(s) from being ejected or pulled from the basket. \*\*
- Employees shall not be permitted to belt off to any adjacent structure, pole, or equipment while working from an aerial lift.
- Employees shall always stand firmly on the floor of the basket and shall not sit, straddle, or climb on the edge of the basket or use planks, ladders, or other devices for a work position.
- Maintain a minimum clearance of at least 10' away from the nearest energized power lines or electrical power source, including any conductive equipment, tool, or other conductive object. Always treat power lines, wires, or other conductors as energized, even if they are down or appear to be insulated.
- Do not allow workers to position themselves between overhead hazards, such as joists or beams, and the rails of the basket. If the basket moves workers can be crushed or caught between the basket and any overhead fixed object.
- Never override hydraulic, mechanical, or electrical safety devices.
- Set the brakes and use wheel chocks when working on an incline.
- Use outriggers if provided. Ensure they are positioned on pads or solid surface
- Do not exceed the load limits of the equipment.
- Climbers should not be worn while performing work from an aerial lift.

\*Source: [CFR 29 OSHA 1910 subpart F](#)-“Powered Platforms, Man-lifts, and Vehicle-Mounted Work Platforms 1910.67; [CFR 29 OSHA 1926 subpart L](#) “Scaffolds/Aerial Lifts” [1926.453](#).

\*\* As of January 1, 1998, subpart M of this part provides that body belts are not acceptable as part of a personal fall arrest system. The use of a body belt in a tethering system or in fall restraint system is acceptable and is regulated under sec. 1926.502(e).