OSHA Guidelines Relating to the Safe Operation of Scissor Lifts

NOTICE

This reference guide outlines the prescribed safety standards for Scissor Lifts operators.
Certified operators should always perform their job functions using these key standards as a baseline for their performance. Meeting OSHA requirements requires understanding and enforcement of these standards with the implementation of training programs for Scissor lift operators. The following safe operating guidelines include all the rules required by OSHA. Each certified scissor lift operator will be issued a copy of these OPERATING RULES, and each operator will confirm his acknowledgement and understanding of these rules by signing for their receipt. In addition, we recommend that the employer post a copy on the bulletin board near forklift operations to satisfy OSHA and State OSHA requirements.

Scissor Lifts

Scissor lifts are mobile supported scaffold work platforms used to safely move workers vertically and to different locations in a variety of industries including construction, retail, entertainment and manufacturing. Scissor lifts are different from aerial lifts because the lifting mechanism moves the work platform straight up and down using crossed beams functioning in a scissor-like fashion. Although scissor lifts present hazards similar to scaffolding when extended and stationary, using scissor lifts safely depends on considering equipment capabilities, limitations and safe practices.

Specific Requirements

Employers must comply with the following OSHA standards (29 CFR) to protect workers from hazards associated with scissor lifts.

General Industry

- 1910.27 – Scaffolds and rope descent systems
- 1910.28(b)(12) – Duty to have fall protection and falling object protection
- 1910.29(b) (Note) – Fall protection systems and falling object protection-criteria and practices

Shipyards

- 1915.71 – Scaffolds or Staging

Construction

- 1926.20(b) – Accident prevention responsibilities
- 1926.21 – Safety training and education
- 1926.451 – General requirements
- 1926.452(w) – Additional requirements applicable to specific types of scaffolds - mobile scaffolds
- 1926.454 – Training requirements

Additional Information

Many scissor lifts are covered under OSHA's Scaffolding standard. For technical assistance, please refer to OSHA's eTools and other resources on scaffolding.

The American National Standards Institute (ANSI) has standards for manufacturing, owning and operating scissor lifts. They can be found in ANSI A92.3-2006 (Manually Propelled Elevating Aerial Platforms) and A92.6-2006 (Self-Propelled Elevating Work Platforms).

How to safely use Scissor Lifts/ Aerial lifts

Employers need to assess the worksite to identify all possible hazards in order to select the appropriate equipment for the task. Employers who use scissor lifts need to evaluate and implement effective controls that address fall protection, stabilization and positioning. Only **trained workers are allowed to use scissor lifts, and employers must make sure that those workers show that they can use a scissor lift properly**. Safe scissor lift use includes properly maintaining the equipment, following the manufacturer's instructions, providing workers training and needed personal protective equipment (PPE), and implementing safe work practices.

Fall Protection

Scissor lifts must have guardrails installed to prevent workers from falling (see 29 CFR 1926.451(g) or 29 CFR 1910.29(b). [Note: for this section, the criteria and practices requirements for guardrail systems on scaffolds are contained in 29 CFR part 1926, Subpart L or 29 CFR 1915.73].

Employers should train workers to:

- Check to see that a guardrail system is in place before working on the scissor lift.
- Only stand on the work platform; never stand on the guardrails.
- Keep work within easy reach to avoid leaning away from the scissor lift.

Stabilization

Employers should ensure that scissor lifts are stable and will not tip over or collapse. Some safe work practices to ensure safe, stable conditions for scissor lift use include:

- Follow the manufacturer's instructions for safe movement—this usually rules out moving the lift in an elevated position.
- Isolate the scissor lift or implement traffic control measures to ensure that other equipment cannot contact the scissor lift.
- Select work locations with firm, level surfaces away from hazards that can cause instability (e.g., drop-offs, holes, slopes, bumps, ground obstructions, or debris).
- Use the scissor lift outside only when weather conditions are good.
- Scissor lifts rated for outdoor use are generally limited to wind speeds below 28 miles per hour.

Although rare, the collapse of scissor lifts can be prevented if employers:

- Ensure that safety systems designed to stop a collapse are maintained and not bypassed.
- Never allow the weight on the work platform to exceed the manufacturer's load rating.
- Never allow equipment other than the scissor mechanism to be used to raise the work platform (e.g., using a forklift to lift the work platform).
- Keep the lift from being struck by other moving equipment on the worksite.

Positioning

Positioning the scissor lift to avoid crushing or electrocution hazards is important for safe use.

Crushing hazards are present in workplaces using scissor lifts and may expose workers nearby, even those not working on the scissor lift.

Scissor lifts present crushing hazards similar to vehicles and other mobile equipment at worksites. Employers should train workers to be watchful when:

- A moving scissor lift is near a fixed object.
- A moving vehicle and the scissor lift are operating closely.
- The scissor lift passes under a fixed object, such as a door frame or a support beam.

Positioning the scissor lift to avoid electrocution, arc flash, and thermal burns is important for safely using scissor lifts near energized power lines. Since electricity can arc or jump from the power line to the scissor lift or worker, electrocution can occur even if neither the scissor lift nor the worker touches the power line.

The following work practices ensure that scissor lifts are safely positioned:

- Implement traffic control measures around the scissor lift to prevent other workers or vehicles from getting too close.
- Use ground guides when operating or moving the scissor lift around the workplace.
- Select work locations that do not approach electrical power sources (e.g., power lines, transformers) by at least 10 feet and that do not pose other overhead hazards (e.g., other utilities, branches, overhangs, etc.).
- If the job task requires work near an electrical source, the employer must ensure that the worker is qualified and has received the required electrical training. [29 CFR 1910.269; 29 CFR 1910.333; 29 CFR 1926 Subpart V]

Maintaining Scissor Lift

Employers should regularly maintain scissor lifts to ensure that they are safe to use (e.g., prevent the lifting mechanism from collapsing). Manufacturer's maintenance and inspection instructions will generally include how to:

- Test and inspect controls and components before each use.
- Ensure that guardrail systems are in good working condition.
- Verify that brakes once set will hold the scissor lift in position.

Training Employees

Employers must provide workers training on hazards, including how to work safely with or near scissor lifts. [29 CFR 1926.454] Training must, at a minimum, include:

- The correct procedures (e.g., the manufacturer's instructions) for operating the scissor lift vertically and while in transit.
- How to handle materials on the scissor lift, including weight limits.
- Other worksite hazards workers may encounter when working on a scissor lift (e.g., contact with electrical wires).

Employers should also train workers in reporting any equipment defects or maintenance needs.