Mobile Elevating Work Platforms (MEWP’s)

ANSI A92.22 Safe Use and A92.24 Training Standards

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Objectives

- Prevent employee accidents (electrocutions, falls, tip-overs) and property damage

- Establish application, inspection, training, maintenance, repair and safe operation requirements

- Establish and provide an understanding of responsibilities

- Promote the safe use of the MEWP’s
American National Standard Institute (ANSI)

- A92.20-Design
- A92.22-Safe Use
- A92.24-Training Standards

Address the design of new aerial lift equipment and the training operators, supervisors and maintenance workers must complete.
American National Standard Institute (ANSI)

- Effective December 2019

- Both new and existing units delivered by sale, lease and rental on or after the effective date.

- ANSI A92 will not require retroactive changes.
New Standards

- Training and compliance terminology (Aerial Lifts are now Mobile Elevating Work Platforms)

- Equipment Classification (Group A and B with Types 1, 2, & 3)

- Safe Use Program

- Risk Assessment (include Rescue Planning)

- Training for Occupants and Supervisors

- Training Documentation
New Standards

The new standard shall be used in conjunction with:

- Manufacturer’s make and model operator’s manual.


- Manuals shall be stored in the weather-resistant compartment on the MEWP.
MEWP Classifications (Groups)

- **(Group A)** - MEWPs with platform such as scissor lifts that move vertically but stay inside the tipping lines.

- **(Group B)** - MEWPs such as boom-type MEWPs move beyond the tipping line (chassis).
MEWP Classifications (Types)

- **(Type 1 MEWPs)** - Traveling is allowed only when in the stowed position.

- **(Type 2 MEWPs)** - Traveling with the work platform elevated but controlled from a point on the chassis.

- **(Type 3 MEWPs)** - Traveling with the work platform elevated but controlled from a point in the work platform.

Image Credit: JLG
Additional Changes (A92.20-1918 Design)

Will require new aerial lifts to be equipped with two types of sensors.

- One sounds an alarm and prevents the machine from operating when the **safe load limits are exceeded**.

- The other is a tilt sensor. It triggers an alarm and prevents movement of the chassis or work platform when **a certain level of slope is exceeded**.
Other equipment changes include:

- Can no longer use chains to close off entrances to the work platform. Instead, they must use gates that include toe guards.

- MEWP platform railings must be at least 43.5 inches in height. The old standard was 39 inches.

- MEWPs used on rough terrain must be outfitted with solid or foam-filled tires rather than air-filled tires. This will improve the stability of the MEWP.
New Standards

Written Safe Use Plan Specific to MEWPs shall be developed and include:

- Detailed site risk assessment to identify hazards, evaluate risk, develop control measures and communicate with affected persons;
- Selection and use of the MEWP’s;
- Worksite inspections and preparation;
- Trained and qualified supervisor(s) to monitor operator work performance and compliance with the new standards;
- Only trained and authorized personnel to operate and/or occupy the MEWP;
- Rescue plans that everyone understands;
- Retention of required documentation; and
- Maintenance including inspection(s) and repairs as required by this standard and manufacturer specifications.
Site Risk Assessment

- Identify Task to be Undertaken
- Select Appropriate MEWP
- Assess Associated Risks
- Identify Control Measure
- Identify Safe Work Practices (includes Rescue Plan)
- Communicate the results

How to Perform a Site Risk Assessment

01 Define the work.
- Task: What specific tasks do you need to do to complete the job?
- Location: Where will you be working? Will you need to transport machines?
- Timing: When does the work need to be finished? Are there times of day you can’t work?

02 Select a MEWP.
- Boom Lift
- Scissor Lift
- Vertical Lift

03 Evaluate risks.
- MEWP-related: Working at height, staying within rated capacity
- Job-specific: Avoiding power lines, accessing hard-to-reach areas
- Additional: Keeping workers on the ground safe, preventing unauthorized use of equipment

04 Identify controls.
- Safe work procedures: Use correct PPE, ensure understanding of fall arrest systems
- Proper training: For operators, occupants, supervisors and maintenance personnel
- Smart scheduling: Organize the work in ways that minimize exposure to hazards
- Rescue planning: May include self-rescue, assisted rescue and/or technical rescue

05 Communicate.
- Operator is trained and authorized to operate the MEWP
- Operator has basic knowledge of MEWP use and safety
- Supervisor monitors use of MEWP to ensure safety plan is followed
- Technician performs MEWP maintenance in line with manufacturer’s requirements

*The steps listed above are several of the necessary steps when performing a site risk assessment. Consult your site supervisor for a full list of required steps.*

Image Credit: JLG
Rescue Plan

- Implement prior to start of work
- Must be in written format
- Made part of the training manual
- Carried out by appropriately trained personnel
Rescue Plan

Rescue Plan can include:

- Self-Rescue (by person involved)
- Assisted Rescue (by others in the work area)
- Technical Rescue (by emergency services)
Rescue Plan

Sample Situations that a rescue plan must include:

- Complete equipment malfunction
- Work platform entanglement
- After a fall
Supervisor Training

All personnel who directly supervise MEWP operators must be trained in the following areas:

- Selection of the right MEWP for the work to be performed;

- The rules, regulations and standards for safe MEWP operation of the work being performed;

- Potential hazards related to the use of MEWPs;

- How to protect against those hazards; and

- Ensuring the operating manual is stored in a weather-resistant compartment on the MEWP.
Occupant Training

- Fall protection use requirements and location of anchor points;
- Factors that could affect stability;
- Safe use of MEWP accessories they are assigned to use;
- Site-specific work procedures related to the MEWP operations;
- Review of the site risk assessment for tasks to be completed;
- General knowledge of the intended purpose and function of MEWP controls; and
- Manufacturer’s warnings and instructions.
Other new training requirements include:

- Site- and equipment-specific rescue plan.

- Operator familiarization prior to operating a type of MEWP.

- Operators must explain to other workers on the lift how to get down if something happens to the operator.

- At least one person who can operate the equipment from the ground if the crew can’t lower themselves.

- Maintenance workers must be trained on all new features, such as the tilt and load sensors.
WHERE WE ARE TODAY?
Questions?
Safety Leading Indicators

- Safety training (new hire orientation and on-going)
- Participation in safety training and safety meetings
- Safety inspection execution and results
- Ergonomic opportunities identified and corrected
- Safety observations
- Employee perception surveys