

Mobile Elevating Work Platforms (MEWP)

Aerial Lifts & Scissor Lifts

General

Tectonic may need to use an aerial lift or scissor lift on a project site. Tectonic does not own any Mobile Elevating Work Platforms (MEWP) such as aerial lifts or scissor lifts. However, in the course of our duties we are required to “occupy” a lift or in the rare occasions operate a lift.

This program provides Tectonic employees with general requirements and identifies the safety requirements for employees using Mobile Elevating Work Platforms (MEWP). MEWP shall include the following:

- Type “3”, MEWP for which traveling with the work platform in the elevated travel position is controlled from the platform.
- Group A, MEWP when elevated stays within tipping lines at all allowable inclinations. (e.g., Scissor Lift):
- Group B MEWPS boom types that reach beyond center mass. (e.g., Boom Lift)

Compliance

All work on Mobile Elevating Work Platforms (MEWP) and equipment shall meet the requirements of all applicable OSHA Standards and Industry Consensus Standards including but not limited to:

- American National Standards Institute (ANSI) A92.22-2018 & A92.24-2018
- American National Standards Institute (ANSI) A92.6 Self Propelled Elevating Work Platforms
- American National Standards Institute (ANSI) A92.5 Boom Supported Elevating Work Platforms
- OSHA 1926 Subpart L- 1926.453: Aerial lifts

Occupant Knowledge

Occupant’s will have general knowledge of the intended purpose and function of MEWP controls and safety-related items specified by the manufacturer, including emergency shut-down and lowering procedures, to the extent required to lower the MEWP safely to the ground/stowed position (required to be conveyed to at least one other occupant)

The MEWP operator shall provide instruction or otherwise ensure all occupants have a basic level of knowledge to work safely on the MEWP. This instruction should also provide at least one of the occupants with the knowledge to operate the controls in an emergency where the operator cannot. This instruction does not give the occupant authorization to operate the controls at any time except in an emergency.

The knowledge that every occupant must have shall include as a minimum the following:

- The requirement to use fall protection and the location of fall protection anchors
- Factors including how their actions could affect stability
- Safe use of MEWP accessories they are assigned to use
- Site-specific work procedures the occupants must follow related to the operation of the MEWP
- Hazards related to the task at hand and their avoidance, to include any applicable site risk assessment

Operator

Operator training, at a minimum, will meet the requirements of all applicable OSHA Standards and Industry Consensus Standards including but not limited to:

- American National Standards Institute (ANSI) A92.22-2018 & A92.24-2018
- OSHA 1926 Subpart L- 1926.453: Aerial lifts

Remote Learning

Operators will complete an online Aerial Lift Training and Certification course that complies with the OSHA & ANSI training requirements that include:

- The ability to self-familiarize yourself with any machine that you have not been specifically certified on by reading the operators manual, doing a walk-around inspection, and understanding the limitations of the equipment.
- Documentation of self-familiarization.
- The ability to provide occupant training.
- Rules, regulations, and standards that apply to MEWPs, including operation, safe use, and training.
- Potential hazards associated with the use of MEWPs and how to protect against them

Hands On

Each lift operator also receives hands on training on the specific lift they will be operating using by a qualified person from the lift supplier/manufacturer. Hands on training will be documented prior to lift operation. If the make and model changes during a given project, then the operator will receive training on that specific piece of equipment and the training documented.

At a minimum, the following will be reviewed with the Operator during hands on training.

- Operators Manual Review and Discussion. Operators shall review the Operator's Manual and familiarize themselves with the specific lift to be operated.
- Site-Specific Hazard Recognition Discussion and Review
- Fall Protection Requirements & approved manufactures anchor points
- Beginning Lift Truck Operation & pre-operation checklist
- General Operating Safety
- Basic Driving Skills
- Pedestrian Traffic

Safe Operation

All operations shall be in accordance with the manufactures instructions, applicable OSHA and ANSI (American National Standards Institute) standards.

- Operator's manuals for the MEWP shall be on the lift at all times.

- Lift access & operation shall be coordinated with site representatives. Prior to operation, a site-specific evaluation will be performed to determine if there are visual obstructions to deal with. Are there overhead obstructions to deal with? What special hazards are on the jobsite?
- The lift shall not be operated if ground conditions/working environments are not suitable for work. Stability in the work zone must be obtained. Lifts shall be set on suitable, level, solid surfaces. Use wheel chocks on sloped surfaces when it is safe to do so.
- The operator will provide occupants with general knowledge of the intended purpose and function of MEWP controls and safety-related items specified by the manufacturer, including emergency shut-down and lowering procedures.
- Personal fall arrest/restraint equipment shall be used at all times while in the lift. Follow the manufacturer's instruction with regard to Personal Fall Protection. Only anchor/tie off points designated by the manufacturer shall be used. Tying off to an adjacent pole, structure, or equipment while working from an aerial lift shall not be permitted. Fall protection equipment and training shall be in accordance with 1926 Subpart M and applicable ANSI standards.
- Rescue from height action plan shall be coordinated with the site and/or site representatives in the event of stranding or protected fall. An area below the lift shall be "marked" out via tape and/or cones to restrict access while the lift is in use. A buddy system shall be used with a person on the ground to assist and prevent unauthorized entry. At least one ground person will have general knowledge of the emergency shut-down and lowering procedures, to the extent required to lower the MEWP safely to the ground/stowed position. All personnel should be equipped in advance with emergency procedures & notification process including fire and police rescue information such as 911.
- Ensure that access gates or openings are closed. Do not climb on or lean over guardrails or handrails.
- Do not use planks, ladders, or other devices as a working position.
- Employees shall always stand firmly on the floor of the basket and shall not sit or climb on the edge of the basket.
- Before operating any lift, operators will read the operator's manual to become familiar with the particular lift they will be operating. All operators are expected to observe and follow all warning decals posted on the vehicle.
- Only those employees who have received instructions regarding the inspection, application, and operation of an aerial lift, including recognition and avoidance of hazards, shall operate that aerial lift.
- The aerial lift shall be used only for intended applications as defined in the equipment's operating manual. Operators shall not use the lift in an unauthorized manner.
- Only authorized and trained personnel shall operate the lift.
- The lift shall be inspected prior to each use in accordance with the manufacturer's requirements. If at any time a lift is found to be defective, in need of repair, or unsafe the lift must be taken out of service. See Mobile Elevating Work Platforms (MEWP), Aerial Lift/Scissor Daily Checklist.
- Boom and basket load limits specified by the manufacturer shall not be exceeded.

- The lift shall be operated in accordance with the manufacture's requirements.
- Do not use the aerial lift as a crane.
- Do not carry objects larger than the platform.
- Do not drive with the lift platform raised (unless the manufacturer's instructions allow this).
- Do not operate lower level controls unless permission is obtained from the worker(s) in the lift (except in emergencies).
- Do not exceed vertical or horizontal reach limits.
- Do not operate an aerial lift in high winds above those recommended by the manufacturer.
- Do not override hydraulic, mechanical, or electrical safety devices.
- Always assume that electrical lines are energized and work beyond the following minimum distances to avoid contact. When you must work closer than the minimum distances, contact the power company to have the lines de-energized or shielded. Minimum safe approach distances not only apply to employees and aerial devices, but also to all tools and equipment. See Table 1-1: Minimum Approach Distances.

Mobile Elevating Work Platforms (MEWP)

Aerial Lift/Scissor Daily Checklist

Prior to each work shift, conduct a pre-start inspection to verify that the equipment and all its components are in safe operating condition. Follow the manufacturer's recommendations and include a check of the items listed below. Do not operate any aerial lift if any of these components are defective. Remove defective aerial lifts from service (tag out) and notify the supplier/manufacturer.

Vehicle components	P/F/NA	Comment
Manufacturers Operations Manuals		
Proper fluid levels (oil, hydraulic, fuel and coolant		
Leaks of fluids;		
Wheels and tires;		
Battery and charger;		
Lower-level controls;		
Horn, gauges, lights and backup alarms;		
Steering and brakes.		
Lift components	P/F/NA	Comment
Operating and emergency controls;		
Personal protective devices;		
Hydraulic, air, pneumatic, fuel and electrical systems;		
Fiberglass and other insulating components;		
Placards, warnings, or operational, instructional and control markings; all readable and in place		
Mechanical fasteners and locking pins;		
Cable and wiring harnesses;		
Outriggers, stabilizers and other structures;		
Loose or missing parts;		
Guardrail systems		
Additional Items specified by manufacturer		
Work Zone Inspections	P/F/NA	
Drop-offs, holes, or unstable surfaces such as loose dirt;		
Inadequate ceiling heights;		
Slopes, ditches, or bumps;		
Debris and floor obstructions;		
Overhead electric power lines and communication cables;		
Other overhead obstructions;		
Other hazardous locations and atmospheres;		
High wind and other severe weather conditions, such as ice; and		
The presence of others/pedestrians in close proximity to the work		

Table 1-1: Minimum Approach Distances

Nominal Voltage kV Phase to Phase*	Distance	
	Feet, inches	Meters
*Exceeds phase to ground		
0.0 to 1.0	10-00	3.05
1.1 to 15.0	10-00	3.05
15.1 to 36.0	10-00	3.05
36.1 to 50.0	10-00	3.05
50.1 to 72.5	10-09	3.28
72.6 to 121.0	12-04	3.76
138.0 to 145.0	13-02	4.00
161.0 to 169.0	14-00	4.24
230.0 to 242.0	16-05	4.97
345.0 to 362.0	20-05	6.17
500.0 to 550.0	26-08	8.05
785.0 to 800.0	35-00	10.55