

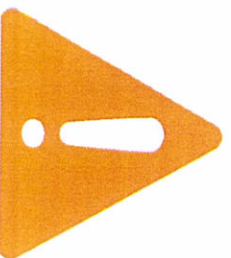
MANUAL OF RESPONSIBILITIES

for Manufacturers, Dealers, Owners, Users, Supervisors, Operators, Occupants, Lessors, Lessees and Brokers of

ANSI/SAIA A92.22 Safe Use &

ANSI/SAIA A92.24 Training Requirements for the Use, Operation, Inspection, Testing and Maintenance of

Mobile Elevating Work Platforms (MEWP)



WARNING

FAILURE TO COMPLY with your REQUIRED RESPONSIBILITIES in the use and operation of MEWPs could result in DEATH OR SERIOUS INJURY.

IMPORTANT

You are required by ANSI/SAIA A92.22-2018 and ANSI/SAIA A92.24-2018 to read and understand YOUR RESPONSIBILITIES before you use or operate this Mobile Elevating Work Platform (MEWP).

The operation of any aerial device is subject to certain HAZARDS that can be protected against only by the exercise of INTELLIGENCE, CARE, AND COMMON SENSE. It is essential to have COMPETENT, CAREFUL PERSONNEL, TRAINED in THE INTENDED USE, SAFE OPERATION, MAINTENANCE AND SERVICE of this type of equipment.

THE USER AND OPERATOR MUST MAKE DECISIONS on the maintenance, use, and operation of the MEWP with due consideration for the fact that the **SAFETY OF THE OPERATION AND OTHER PERSONNEL** is dependent on those decisions. **FAILURE TO COMPLY** with your **REQUIRED RESPONSIBILITIES** in the use and operation of the MEWP could result in **DEATH OR SERIOUS INJURY**.

Refer to the manufacturer's operation and safety manual for **INFORMATION ON SAFE USE AND OPERATION OF THE AERIAL DEVICE**.

The person responsible for Design, Calculations, Safety Requirements and Test Methods for Mobile Elevating Work Platforms (MEWPs) should obtain a copy of the ANSI/SAIA A92.20-2018 Standard from the Scaffold & Access Industry Association at 400 Admiral Blvd. Kansas City, MO 64106

The ANSI/SAIA A92.22-2018 Safe Use of MEWPs and ANSI/SAIA A92.24-2018 Training Requirements for the Use, Operation, Inspection, Testing and Maintenance of MEWPs became effective December 2019. This Manual incorporates sections from those standards as follows:

Table of Contents

5. Definitions	6	6.1.2.3 Assess the Risks Associated with the Task	13	6.8.3.1 General	17
A92.22 Safe Use of Mobile Elevating Work Platforms (MEWP)		6.1.2.4 Identify Control Measures	13	6.8.3.2 Inadequate Outrigger Foundations	17
4. General Requirements	9	6.1.2.5 Identify Safe Work Procedures	13	6.8.3.3 Sub-surface Voids	18
4.1 Basic Principles	9	6.1.2.6 Rescue from Height	13	6.8.4 Public Roads	18
4.2 Safe Use Planning	9	6.1.2.7 Communicate the Results	14	6.8.5 Slope and Grade	18
4.3 Manuals	10	6.2 MEWP Personnel Qualifications and Training Requirements	14	6.8.6 Deployment of Stability-enhancing Means	18
4.3.1 Operation Manuals	10	6.2.1 Operator Qualification and Training	14	6.8.7 Guardrail System	18
4.4 Record Retention	10	6.2.2 Occupant Knowledge	14	6.8.8 Distribution of Load	18
4.5 Modifications	10	6.2.3 Supervisor Training	15	6.8.9 Maintaining Overhead Clearance	18
5. Maintenance, Inspection and Repair	10	6.2.4 Retraining	15	6.8.10 MEWP Travelling	18
5.1 Scheduled Maintenance	10	6.2.5 Familiarization	15	6.8.10.1 Before Moving the Work Platform or MEWP	18
5.2 Pre-delivery Inspections	11	6.3 Assistance to Operators	15	6.8.10.2 Moving or Traveling	19
5.3 Frequent Inspection	11	6.4 Before Operation	16	6.8.10.3 While Working at Height	19
5.4 Annual Inspection	11	6.5 Work Place Inspection	16	6.8.11 Work Platform Materials	19
5.5 Pre-start Inspection	12	6.6 Prior to Each Operation	16	6.8.12 Electrical Hazards	19
5.6 Maintenance and Repair Training	12	6.7 Understanding of Hazardous Atmosphere Locations	17	6.8.13 Footing for Personnel	19
5.7 Maintenance and Repair Safety Precautions	12	6.8 Specific Requirements of Operation	17	6.8.14 Precautions for Other Moving Equipment	19
5.8 Replacement Parts	12	6.8.1 Fall Protection	17	6.8.15 Reporting Problem(s) or Malfunction(s)	20
5.9 Safety-related Bulletins	12	6.8.2 Weather Considerations	17	6.8.16 Reporting Potentially Hazardous Locations and/or Hazardous Atmospheres	20
6. Operation	13	6.8.2.1 Effect of Wind Forces on MEWPs	17	6.8.17 Hazardous Location Operation and/or Hazardous Atmospheres	20
6.1 Risk Assessment	13	6.8.2.2 Effect of Wind on Equipment in the Work Platform	17	6.8.18 Entanglement	20
6.1.1 General	13	6.8.2.3 Local Wind Effects	17		
6.1.2 Stages of Risk Assessment	13	6.8.2.4 Use in Thunderstorms	17		
6.1.2.1 Identify the Task to be Undertaken	13	6.8.3 Ground Condition Considerations	17		
6.1.2.2 Select an Appropriate MEWP	13				

6.8.19	Load Transfer.....	20
6.8.20	Work Area.....	20
6.8.21	Ventilation.....	20
6.8.22	Fuelling.....	20
6.8.23	Battery Charging.....	20
6.8.24	Improper MEWP Stabilization ..	20
6.8.25	Misuse as a Crane.....	20
6.8.26	Use of MEWP for Grounding ...	20
6.8.27	Climbing the Extending Structure.....	20
6.8.28	Unusual Operating Support Conditions.....	21
6.8.29	Stunt Driving.....	21
6.8.30	Unauthorized Use.....	21
6.8.31	Altering and Disabling.....	21
6.8.32	Snagged Platform.....	21
6.8.33	Exiting (or Entering) a MEWP at Height.....	21
6.8.34	Safe Carrying of Materials.....	21
6.8.35	Carrying Materials Outside the Work Platform.....	22
6.8.36	Allowable Rated Forces.....	22
6.8.37	Misuse as a Jack.....	22
6.8.38	Moving Overhead Obstructions.....	22
6.8.39	Parking of the MEWP.....	22
7. Transport		22

A92.24 Training Requirements for the Use, Operation, Inspection, Testing and Maintenance of Mobile Elevating Work Platforms (MEWP)

4. Safe Use of the MEWP	23
5. Requirements for Training, Familiarization and Authorizing Operators	23
6. Responsibility for Training and Familiarization	23
6.1 General.....	23
6.2 Manufacturer.....	23
6.3 Dealer and Owner.....	23
6.4 User.....	23
6.5 Supervisor.....	23
6.6 Operator.....	23
6.7 Occupant.....	24
6.8 Familiarization.....	24
6.9 Retraining.....	24
7. Training Content	24
7.1 General.....	24
7.2 Contents of Theory (Classroom/Online) Training	24
7.3 Contents of Practical (Hands-On) Training.....	25
7.4 Occupant Knowledge.....	25
7.5 Supervisor Training.....	26
8. Administration of Training	26
8.1 Trainers.....	26
8.2 Curriculum.....	26

8.3 Training Environment.....	26
8.4 Testing.....	26
8.5 Personal Documentation of Training.....	26
8.6 Record Retention.....	27

Mobile Elevating Work Platform Examples

Examples of Type 1, Group A MEWPs.....	28
Examples of Type 1, Group B MEWPs.....	28
Examples of Type 2, Group A MEWPs.....	29
Examples of Type 2, Group B MEWPs.....	29
Examples of Type 3, Group A MEWPs.....	30
Examples of Type 3, Group B MEWPs.....	30

3. DEFINITIONS

Aerial device: Any device, extensible, articulating or both, which is primarily designed and used to position personnel, designed to the ANSI/SAIA A92.20 standard.

Note: This device can also be used to handle material, if designed and equipped for that purpose.

Anchorag(e)s: A designated point of attachment utilized with a personal fall protection system.

Authority having jurisdiction: A federal, provincial, territory or municipal ministry, department, board, agency, or commission that has responsibility for regulating by statute the use of products, materials, or services within its jurisdiction.

Authorized personnel (authorized person): Personnel approved or assigned by the user to perform a specific type of duty or duties at a specific location or locations at a work site.

Broker: An entity that arranges a lease or transfer of ownership of the MEWP, but does not own the MEWP. If the entity is an employee of the buyer, seller, lessor or lessee of the MEWP, this entity is not considered a broker.

Note: A manufacturer, dealer, owner, user, operator, lessor, or lessee is considered to be and assumes the responsibilities of a broker when that entity is acting in the capacity of this definition.

Care: To provide what is both necessary and required for the health, welfare, maintenance, and protection of personnel and the MEWP.

Chassis: Part of the MEWP that provides support for mobility of the elevating assembly.

Configuration: An allowable operating set up specific to the MEWP.

Control: By virtue of possession through custody, as defined in this standard, the required use of power, influence, and authority to behave and/or to direct the behavior of those who are involved in the

application, use, inspection, maintenance of an MEWP, and compliance with all applicable provisions of this standard.

Control(s): A device actuated by an operator to affect a response from the MEWP.

Note: Examples of controls include interlocks, MEWP controls or powered functions.

Custody: Possession by ownership, purchase,

acquisition, rental, lease, or other means of transfer which requires the exercise of care and control, as defined in this standard, for the health, welfare, maintenance, and protection of personnel and the MEWP.

Dealer: An entity who buys, rents or leases from a manufacturer or distributor and who generally sells, rents and services MEWPs.

Note: A manufacturer, owner, user, operator, lessor, lessee, or broker is considered to be and assumes the responsibilities of a dealer when that entity is acting in the capacity of this definition.

Delivery: Transfer of care, control and custody of the MEWP from one person or entity to another person or entity.

Elevated travel position: Configuration of the MEWP for travel outside of the lowered travel position.

Elevating assembly: The work platform and the extending structure.

Entity: An individual or company that has its own set of responsibilities pertaining to MEWP design, safe-use and training, and may include manufacturers, dealers, owners, users, supervisors, operators, occupants, lessors, lessees, and brokers.

Examination/re-examination: Evaluating or testing proficiency and retention of the subject matter covered in the training/retraining of the MEWP operator

Examiner: A qualified person who evaluates or tests the competency of the trainee.

Extending structure: Structure which is connected to the chassis and supports the work platform and which allows movement of the work platform to its required position.

Fall arrest system: Personal fall protection system designed to arrest the fall of a worker.

Fall restraint system: Protection system that restrains or prevents a worker from being exposed to a fall.

Familiarization: Providing the necessary information regarding the features, functions, devices, limitations and operating characteristics as defined by the manufacturer in the operator's manual, in order to properly utilize a specific model MEWP, to include the location of the manufacturer's operation manuals.

Group A: MEWPs on which the vertical projection of the center of the platform area, in all platform configurations at the maximum chassis inclination specified by the manufacturer, is always inside the tipping lines.

Group B: MEWPs not in Group A.

Guardrail system: A vertical barrier primarily intended to protect personnel from falling to lower levels.

Hazardous atmosphere: Any location that contains, or has the potential to contain, an explosive or flammable atmosphere as defined in ANSI/NFPA 505.

Lessee: An entity to whom a MEWP is provided by lease, rental, loan or other arrangement.

Note: A manufacturer, dealer, owner, user, operator, lessor, or broker is considered to be and assumes the responsibilities of a lessee when that entity is acting in the capacity of this definition.

Lessor: An entity who leases, rents, loans or otherwise provides a MEWP to another party for the beneficial use of that party.

Note: A manufacturer, dealer, owner, user, operator, lessee, or broker is considered to be and assumes the responsibilities of a lessor when that entity is acting in the capacity of this definition.

Load sensing system: System of monitoring designated loads (by the design standard) on the work platform.

Lowered travel position: Configuration(s) of the MEWP as defined by the manufacturer for travel at maximum travel speed.

Lowering: Operations to move the work platform to a lower level.

Maintenance: The act of upkeep such as inspection, lubrication, refuelling, cleaning, adjustment and scheduled part(s) replacement.

Manual of Responsibilities: A document containing definitions and requirements mandated in applicable A92 Standards for the following entities: Manufacturers, Dealers, Owners, Users, Supervisors, Operators, Occupants, Lessors, Lessees and Brokers.

Manufacturer: An entity who makes, builds, or produces a MEWP.

Note: A dealer, owner, user, operator, lessor, lessee or broker is considered to be and assumes the responsibilities of a manufacturer when that entity is acting in the capacity of this definition.

Mobile Elevating Work Platform (MEWP): Machine/device intended for moving persons, tools and material to working positions, consisting of at least a work platform with controls, an extending structure and a chassis.

Modification: Change(s) to a MEWP that affects the operation, stability, safety factors, rated load, or safety of the MEWP in any way.

Occupant: An entity on the work platform.

Operation manuals: Manuals provided by the MEWP manufacturer at the time of delivery located on the MEWP in a weather resistant storage location intended to be an integral part of the MEWP.

Operator: An entity qualified to control the movement of a MEWP.

Note: A manufacturer, dealer, owner, user, lessor, lessee or broker is considered to be and assumes the responsibilities of an operator when that entity is acting in the capacity of this definition.

Operator's manual: A manual provided by the manufacturer and intended to be a part of the MEWP.

Note: The manual includes information to allow for safe operation of the MEWP.

Oscillating axle: Supporting structure which allows mainly vertical movement of the end wheel assemblies independently or in relation to each other.

Outriggers: Devices at the chassis that increase the stability of the MEWP and that are capable of lifting and levelling the MEWP.

Owner: An entity who has possession of the MEWP by virtue of purchase or legal possession of the MEWP.

Note: A manufacturer, dealer, user, operator, lessor, lessee or broker is considered to be and assumes the responsibilities of an owner when that entity is acting in the capacity of this definition.

Platform: (See Work platform)

Qualified person: Person who, by possession of a recognized degree, certificate or professional standing, or by extensive knowledge, training and experience, has successfully demonstrated his/her ability to solve or resolve problems related to the subject matter, the work or the project.

Rated horizontal force: The maximum horizontal force that can be applied to the MEWP work platform as specified by the manufacturer.

Repair: The act of restoring to good condition that which has been broken, damaged or worn due to use, abuse or other reasons.

Retraining: Required instruction based on the user's observations or evaluations to maintain a previously trained person's status as a qualified operator.

Safety related bulletin: Publication from the manufacturer of the MEWP that requires attention to ensure safe operation of the MEWP that identifies and provides resolution to a safety-related issue.

Shall: The word "shall" is to be understood as being mandatory.

Should: The use of the word "should" is to be understood as advisory, and having the same effect as "recommended."

Stability: A condition in which the sum of the moments which tend to overturn the MEWP is less than the sum of the moments tending to resist overturning.

Stabilizers: Devices that increase the stability of the MEWP but are not capable of lifting or levelling the MEWP.

Stabilizing device(s): Device(s) that require deployment on a MEWP, such as stabilizers, outriggers, or extendible axles to meet the stability requirements.

Stowed position: Configuration of the MEWP as defined by the manufacturer in which the extending structure is lowered and retracted and stabilizers and/or outriggers are retracted.

Supervisor: An entity assigned by the user to monitor operator performance and supervise their work.

Trainer: A qualified person who conducts the training.

Training: Instruction to enable the trainee to become a qualified person regarding the task to be performed, including knowledge regarding potential hazards.

Travel restraint: A fall protection system consisting of personal protective equipment that prevents a person from reaching a fall hazard.

Transport: Any movement of the MEWP outside the boundaries of the working site.

Travelling: Any movement of the chassis, except when the MEWP is being transported.

Type 1 MEWP: MEWP for which travelling is allowed only when in the stowed position.

Note: Refer to Section 1.1.3 MEWP Classification for application of groups and types.

Type 2 MEWP: MEWP for which travelling with the work platform in the elevated travel position is controlled from a point on the chassis.

Note: Type 2 and type 3 MEWPs can be combined.

Type 3 MEWP: MEWP for which travelling with the work platform in the elevated travel position is controlled from a point on the work platform.

Note: Type 2 and type 3 MEWPs can be combined.

Underbridge MEWP: Type 1 and 2 MEWPs intended to provide access to the sides or beneath a bridge structure and equipped to inspect and maintain bridge structures that can elevate/lower personnel above/below grade.

User: An entity that has care, custody and control of the MEWP.

Note: A manufacturer, dealer, owner, operator, lessor, lessee or broker is considered to be and assumes the responsibilities of a user when that entity is acting in the capacity of this definition.

Vehicle-mounted MEWP: MEWP whose elevating assembly is designed for and installed on a vehicle chassis designed for use on public roads

Work platform: Component of the MEWP intended for carrying personnel along with their necessary tools and materials

1.1.3 MEWP Classifications

MEWP classifications are made up of a MEWP group (platform location in reference to tipping line) with an associated MEWP type (reference to traveling).

Note: See definitions for Group and Type.

American National Standard for the Safe Use of Mobile Elevating Work Platforms (MEWPs)

4 GENERAL REQUIREMENTS

4.1 Basic principles

Whenever an entity (a manufacturer, dealer, owner, user, supervisor, operator, occupant, lessor, lessee, or broker) is acting in the capacity of another entity as defined in this standard, they shall assume the responsibilities of that entity. Note: See entity definitions.

4.1.1 All entities shall apply the information in this American National Standard, and as applicable, shall be supplemented by good job management, safety control and the application of sound principles of safety, training, inspection, maintenance, application and operation. The parameters of intended use and expected environment shall be considered. Decisions on the use and operation of the MEWP shall be made with consideration for safety of the MEWP occupants and persons in the operating vicinity. The selection, positioning, operation, maintenance and pre-start, pre-delivery, frequent and annual inspections of a MEWP shall be performed by a qualified person in accordance with the manufacturer's requirements, considering the environment and severity of use. All tasks shall be properly planned, appropriately supervised and carried out in a safe manner. Having identified the hazards associated with the use of MEWPs, the qualified person shall evaluate the risks associated with their use and put appropriate control measures in place as identified by the risk assessment.

When an entity rents, leases, sells or provides for any form of beneficial use, they assume the responsibilities of a dealer.

These basic principles shall be applied as follows:

Dealer: Since the dealer offers training and provides MEWPs to users, the basic principles apply in relationship to the maintenance, inspection, and repair of the equipment and when in the training of operators.

Users: Since the user has direct control over the application and operation of MEWPs, conformance with good safety practices in this area is the responsibility of the user and the operating personnel, including supervisors, operators and occupants.

Operator: Since the operator is in direct control of the MEWP, conformance with good safety practices in this area is the responsibility of the operator.

4.1.2 The operation of any MEWP is subject to potential hazards that can be protected against only by the exercise of care and good judgement, and not by any device. The user shall ensure that personnel are trained, qualified and authorized (see ANSI A92.24 Training Requirements for the Use, Operation, Inspection, Testing and Maintenance of Mobile Elevating Work Platforms) in the intended use, safe operation, inspection, maintenance and familiarization on different models and classifications of MEWPs.

4.2 Safe Use Planning

A safe use program specific to MEWPs shall be developed by the user and shall include, but not be limited to the following:

- a) performing a site risk assessment to identify hazards, evaluate risk, develop control measures and communicate with affected persons (see 6.1);
- b) selection, provision and use of a suitable MEWP and work equipment associated with it;
- c) access, preparation and maintenance of the site, as required, to include an assessment that the support surface is adequate to support the weight of the MEWP;
- d) MEWP maintenance including inspection(s) and repairs as required by this standard and by the manufacturer;
- e) only trained and authorized personnel are allowed to operate and/or occupy the MEWP;
- f) familiarization of authorized MEWP operator(s) with the specific MEWP to be used;
- g) inform the operator of local site requirements and warn and provide the means to protect against identified hazards in the areas where the MEWP will be operated;
- h) have trained and qualified supervisor(s) to monitor the performance of the work of the operator to ensure compliance with provisions of this standard;
- i) prevention of unauthorized use of the MEWP;
- j) safety of persons not involved in the operation of the MEWP; and
- k) documentation required in clause 4.4.

	MANUFACTURER	DEALER	OWNER	USER	SUPERVISOR	OPERATOR	OCCUPANT	LESSOR	LESEE	BROKER
4.1 Basic principles	X	X	X	X	X	X	X	X	X	X
4.1.1	X	X	X	X	X	X	X	X	X	X
When an entity rents, leases, sells or provides for any form of beneficial use, they assume the responsibilities of a dealer.										
These basic principles shall be applied as follows:										
Dealer: Since the dealer offers training and provides MEWPs to users, the basic principles apply in relationship to the maintenance, inspection, and repair of the equipment and when in the training of operators.	X									
Users: Since the user has direct control over the application and operation of MEWPs, conformance with good safety practices in this area is the responsibility of the user and the operating personnel, including supervisors, operators and occupants.			X	X	X	X				
Operator: Since the operator is in direct control of the MEWP, conformance with good safety practices in this area is the responsibility of the operator.					X					
4.1.2			X							
4.2 Safe Use Planning										
A safe use program specific to MEWPs shall be developed by the user and shall include, but not be limited to the following:										
a) performing a site risk assessment to identify hazards, evaluate risk, develop control measures and communicate with affected persons (see 6.1);										
b) selection, provision and use of a suitable MEWP and work equipment associated with it;										
c) access, preparation and maintenance of the site, as required, to include an assessment that the support surface is adequate to support the weight of the MEWP;										
d) MEWP maintenance including inspection(s) and repairs as required by this standard and by the manufacturer;										
e) only trained and authorized personnel are allowed to operate and/or occupy the MEWP;					X					
f) familiarization of authorized MEWP operator(s) with the specific MEWP to be used;										
g) inform the operator of local site requirements and warn and provide the means to protect against identified hazards in the areas where the MEWP will be operated;										
h) have trained and qualified supervisor(s) to monitor the performance of the work of the operator to ensure compliance with provisions of this standard;										
i) prevention of unauthorized use of the MEWP;										
j) safety of persons not involved in the operation of the MEWP; and										
k) documentation required in clause 4.4.										

American National Standard for the Safe Use of Mobile Elevating Work Platforms (MEWPs)

	MANUFACTURER	DEALER	OWNER	USER	SUPERVISOR	OPERATOR	OCCUPANT	LESSOR	LESEE	BROKER
4.3 Manuals										
4.3.1	Operation Manuals. All manuals provided by the manufacturer and stored in the weather-proof compartment on the MEWP that are an integral part of the MEWP and communicates necessary safety information to users and operators									
4.3.1.1	X	X	X						X	
4.3.1.2				X	X			X		X
4.3.1.3			X	X						X
4.3.1.4						X				
4.3.1.5							X			
4.4 Record Retention										
The following records shall be retained by the designated entities for a period of at least four years:										
1)	X	X	X							X
2)			X							
3)		X	X							
4)	X	X		X						
4.5 Modifications										
Only the owner can authorize a modification to a MEWP after meeting requirements of this section. Modifications or additions to a MEWP shall be made only with prior written permission of the manufacturer. In case the manufacturer no longer exists, modifications to a MEWP shall be made under the direction of an engineer with expertise in MEWPs. The owner shall retain written permission and provide it to any subsequent owner, as applicable. A user shall ensure that MEWP supervisors and operators are aware and comply with the requirement that only the MEWP owner can authorize a modification to a MEWP.										
5 MAINTENANCE, INSPECTION AND REPAIR										
5.1 Scheduled Maintenance										
5.1.1			X							
5.1.2				X						

American National Standard for the Safe Use of Mobile Elevating Work Platforms (MEWPs)

	MANUFACTURER	DEALER	OWNER	USER	SUPERVISOR	OPERATOR	OCCUPANT	LESSOR	LESEE	BROKER
5.2 Pre-delivery Inspections Prior to each delivery, the owner or dealer delivering the MEWP for sale, lease, rental or any form of use shall ensure the MEWP is inspected, repaired and adjusted in accordance with the manufacturer's specifications.		X	X							
5.3 Frequent Inspection										
5.3.1 Prior to placing the MEWP into service, the MEWP owner shall ensure a frequent inspection is performed in accordance with the requirements of sections 5.3.2, 5.3.3 and 5.3.4 and the manufacturer's instructions unless it is determined that the frequent inspection is current.			X							
5.3.2 A frequent inspection is required if the MEWP has been out of service for a period longer than three months, or if environmental conditions require a shorter period.			X							
5.3.3 The inspection shall be made by a person qualified to inspect the specific make and model of the MEWP. The inspection shall include all items specified by the manufacturer for a frequent inspection, to include manufacturer's bulletins, and shall, as applicable, include but not be limited to the following: a) all functions and their controls, including controls for emergency operations, for speed(s), proper operation and limits of motion; b) ground-level controls, including the provisions for overriding of additional controls; c) all chain and cable mechanisms, for adjustment and worn or damaged parts; d) all guards are in place and in good working order; e) lubrication of all moving parts, inspection of filter element(s), hydraulic oil, engine oil, and coolant; f) visual inspection of structural components and other critical components such as fasteners, pins, shafts, turntable attachment devices and locking devices; g) instructions, warnings and control markings are in place and legible; h) hydraulic or pneumatic systems, for proper fluid or pressure levels and observable for proper operation, damage, leaks or external wear; i) electrical systems, for signs of damage, deterioration, dirt or moisture accumulation; j) tires for damage and proper inflation, as applicable; k) wheel fasteners are in place and properly tightened; l) lights, if applicable, for proper operation and illumination; m) batteries are checked for adequate fluid level and connections are secure and free from damage and corrosion, if applicable; n) drive systems, brakes, steering and speed controls for proper operation; o) audible or visual alarms, if applicable, for proper operation; and p) any communication system between platform and ground is working properly.				X						
5.3.4 The MEWP shall not be placed into service until all malfunctions and problems have been corrected.			X							
5.4 Annual Inspection										
5.4.1 Owners shall ensure an annual inspection is performed no later than thirteen (13) months from the date of the prior annual inspection. The inspection shall be performed by a person qualified to inspect the specific make and model of MEWP. The inspection shall include all items included in the frequent inspection (see 5.3.3) plus items specified by the manufacturer for an annual inspection, to include manufacturer's bulletins. The inspection shall verify that the MEWP is registered with the MEWP manufacturer and that any open safety-related bulletins are addressed as part of the inspection. The MEWP shall not be placed back into service until all malfunctions and problems identified in the inspection have been corrected.			X							
5.4.2 The owner shall maintain on the MEWP a means, as provided by the manufacturer, to identify the date the last annual inspection was performed and the interval at which annual inspections are required.			X							

American National Standard for the Safe Use of Mobile Elevating Work Platforms (MEWPs)

	MANUFACTURER	DEALER	OWNER	USER	SUPERVISOR	OPERATOR	OCCUPANT	LESSOR	LESEE	BROKER
5.5 Pre-start Inspection Before each day or at the beginning of each shift, the user shall ensure and the operator shall perform a pre-start and functions test that includes the following:										
a) operating and emergency controls;										
b) audible and visual alarms and beacons;										
c) personal protective devices that will be worn while operating/occupying the MEWP;										
d) air, hydraulic and fuel-system leaks;										
e) electrical cables and wiring harness;										
f) loose, damaged, worn or missing parts;										
g) tires (where applicable tire pressure), wheels and wheel fasteners;										
h) instructions, warnings, control markings and operator's manual(s);						X				
i) structural items including extending structure and stabilizers/outriggers;							X			
j) work platform, including guardrail system, floor, anchorage and mounting;										
k) cleanliness and general signs of damage;										
l) brake operation and performance;										
m) fluid levels including engine coolant, engine oil and hydraulic oil;										
n) pins, pin securing devices and visible damage to the means of support of the work platform and extending structure;										
o) operation of stabilizers/outriggers, extendable and oscillating axles; and										
p) any additional item specified by the manufacturer.										
5.6 Maintenance and Repair Training Dealers, owners and users shall ensure that their maintenance and repair personnel are trained by a qualified person to inspect and maintain the MEWP in accordance with Section 4.5 and 5 of this Standard and the manufacturer's requirements.										
		X	X	X						
5.7 Maintenance and Repair Safety Precautions Dealers, owners and user shall ensure that maintenance and repair personnel are aware of and comply with the requirements of this section.										
		X	X	X						
5.7.1 Before adjustments and repairs are started on MEWPs, the following precautions shall be taken, as applicable:										
a) read and understand the instructions and precautions provided by the MEWP manufacturer;										
b) power plant stopped and means of starting rendered inoperative;										
c) all controls in the "off" or "neutral" position and all operating systems secured from inadvertent motion;		X	X	X						
d) work platform lowered to the full down position, if possible, or otherwise secured to prevent motion;										
e) hydraulic oil pressure relieved from all hydraulic circuits before loosening or removing hydraulic components; and										
f) safety props or latches used as required and instructed by the manufacturer.										
	X	X	X	X	X	X	X	X	X	X
5.8 Replacement Parts										
	X	X	X	X	X	X	X	X	X	X
5.9 Safety-related Bulletins										
5.9.1 All entities shall comply with safety-related bulletins from the manufacturer.										
	X	X	X	X	X	X	X	X	X	X
5.9.2 Records shall be retained by entities in accordance with 4.4 of this Standard and/or as instructed by the safety-related bulletin.										
	X	X	X	X	X	X	X	X	X	X
5.9.3 The owner shall ensure that the MEWP is registered with the manufacturer so safety-related bulletins may be received from the manufacturer.										
			X							

American National Standard for the Safe Use of Mobile Elevating Work Platforms (MEWPs)

6 OPERATION

The user shall direct personnel operating a MEWP to be in compliance with the provisions set forth in this standard and the manufacturer's requirements. The user shall develop and implement a safe use program (4.2), monitor personnel performance and supervise their work to ensure the use, application and operation of the MEWP is in conformance with the provisions set forth in this standard, warn personnel of potential hazards as defined in section 6, provide means to protect against identified hazards and explain the potential consequences of not following proper operating guidelines. User's personnel, to include MEWP supervisors, operators and occupants, shall comply with applicable requirements in section 6.

6.1 Risk Assessment

6.1.1 General

It is the user's responsibility to ensure an appropriate MEWP risk assessment is performed by qualified personnel consistent with all provisions within Section 6.1.

6.1.2 Stages of Risk Assessment

6.1.2.1 Identify the Task to be Undertaken

As the first stage in the risk assessment, the task to be undertaken should be clearly identified, together with the location and timing.

6.1.2.2 Select an Appropriate MEWP

There are many different types of MEWPs with various rated capacities, working heights and reaches. The user shall select an appropriate machine based upon consideration of factors including, but not limited to, the task to be undertaken, the constraints of the worksite, ground conditions, site access and proximity to the public or other workers.

6.1.2.3 Assess the Risks Associated with the Task

The risks associated with the task specific to MEWP operations shall be identified. These might be associated with the location where the work is to be carried out, the nature of the MEWP or the personnel, materials and equipment to be carried.

6.1.2.4 Identify Control Measures

Once the hazards and risks involved in the task have been identified, the procedures and measures required to control them shall be identified and implemented.

6.1.2.5 Identify Safe Work Procedures

The risk assessment results are used to plan safe work procedures, including any contingencies required, in carrying out the identified tasks.

6.1.2.6 Rescue from Height

6.1.2.6.1 Rescue planning is a necessary component of a risk assessment when working at height. There are situations that require prior planning to ensure a safe and timely rescue.

6.1.2.6.2 A system failure of the MEWP that results in the loss of the platform control functions may be addressed by the use of:

- a) The MEWP auxiliary power function of the controls;
- b) The MEWP secondary manual emergency descent controls.

Follow the manufacturer's directions in the use of these systems. This plan should be included in operator training and occupant instructions.

6.1.2.6.3 A fall from the platform when using a fall arrest system will require a rescue plan to determine how the affected worker will return safely to the platform or ground. The plan shall be put in writing and become part of the company's training manual. All occupants shall receive training that explains procedures to follow if they fall and await rescue or witness another worker's fall. Ideally this plan will limit the time that an occupant is suspended after an arrested fall.

	MANUFACTURER	DEALER	OWNER	USER	SUPERVISOR	OPERATOR	OCCUPANT	LESSOR	LESEE	BROKER
				X	X	X	X			
				X						
				X						
				X						
				X						
				X						
				X						
				X						
				X						
				X						
				X						

American National Standard for the Safe Use of Mobile Elevating Work Platforms (MEWPs)

	MANUFACTURER	DEALER	OWNER	USER	SUPERVISOR	OPERATOR	OCCUPANT	LESSOR	LESEE	BROKER
<p>6.1.2.6.4 A rescue plan can include the following:</p> <ul style="list-style-type: none"> a) Self-rescue – by person involved; b) Assisted rescue – by others in the work area; c) Technical rescue – by emergency services. 			X							
<p>6.1.2.6.5 As part of the plan, consideration shall be given to the rescue of MEWP work platform occupants if the machine is unable to be lowered for any reason, such as complete machine malfunction or work platform entanglement. In the case of platform entanglement, the operator and occupants shall be removed from the platform prior to attempts being made to free the platform. MEWPs which have tipped beyond their center of gravity shall be stabilized and secured before attempting rescue. Technical rescue might also be necessary in the event of illness, injury or risk of exposure. Any rescue procedure shall take into account the reasons why the platform may be stranded at height and any need for prompt action.</p>			X		X	X				
<p>6.1.2.6.6 Rescue should always be carried out by appropriately trained personnel, using the machine's ground controls or secondary lowering system when feasible. All rescue procedures near electrical conductors shall comply with section 6.8.12 of this Standard.</p>			X							
<p>6.1.2.6.7 Rescue using another MEWP should be carried out only once a site review has been carried out and a plan is created. The plan should take into account the following:</p> <ul style="list-style-type: none"> a) the rescue machine should be positioned to enable the rescue procedure to be carried out without compromising the safety of personnel involved in the rescue; b) the platforms of both machines shall be adjacent to each other with a minimal horizontal/vertical gap between them. The power to controls on both machines should be switched off during the transfer; c) the person being rescued should be fitted with proper fall protection equipment and the lanyard should be attached to the anchor points on the rescue machine before the transfer takes place; d) the rescue machine shall not be overloaded during the rescue. This could mean making more than one trip to complete the rescue; and e) always comply with the manufacturer's requirements stated in the operator's manual. <p>If there is injury, illness or risk of exposure (such as suspension trauma), emergency personnel shall be called. Suspension trauma can occur if a person has been suspended at height for a period of time.</p>			X							
<p>6.1.2.7 Communicate the Results</p>										
<p>6.1.2.7.1 The user shall communicate the results of the risk assessment to the entities involved.</p>			X							
<p>6.1.2.7.2 Before a job starts and periodically throughout a long-term job, the risk assessment shall be reviewed to check if any parts of the tasks or the working environment have changed and the effect that it could have on the safety of the operation. If any modifications to the risk assessment are required, these shall be communicated to all those involved prior to resuming the job.</p>			X							
<p>6.2 MEWP Personnel Qualifications and Training Requirements</p>										
<p>6.2.1 Operator Qualification and Training</p> <p>The user shall ensure the operator of a MEWP is physically and mentally capable to operate the MEWP safely.</p>			X							
<p>6.2.1.1 The user shall ensure and the operator shall comply with the requirement for operators to be trained and familiarized in accordance with A92.24 and this Standard before being authorized to operate a MEWP. Only trained and authorized persons shall be permitted to operate a MEWP.</p>			X							
<p>6.2.1.2 The user is responsible to assess if personnel are qualified to perform the task.</p>			X							
<p>6.2.2 Occupant Knowledge</p> <p>The user shall ensure that the MEWP operator provide instruction or otherwise ensure all occupants have a basic level of knowledge to work safely on the MEWP. Occupant knowledge shall comply with ANSI A92.24 Section 7.4.</p>			X							

American National Standard for the Safe Use of Mobile Elevating Work Platforms (MEWPs)

	MANUFACTURER	DEALER	OWNER	USER	SUPERVISOR	OPERATOR	OCCUPANT	LESSOR	LESEE	BROKER
<p>6.2.3 Supervisor Training All personnel that directly supervise MEWP operators shall receive training. Users shall ensure personnel that directly supervise MEWP operators are trained as defined in ANSI A92.24 Section 7.5.</p>			X	X						
<p>6.2.4 Retraining The user shall designate a qualified person to monitor, supervise and evaluate operators on a regular basis to ensure their proficiency. Examples of situations when retraining would be necessary include, but are not limited to:</p> <ul style="list-style-type: none"> a) expiration of the operator's valid training period; b) deterioration of the operator's performance; c) the operator's extended period of time with no operation of a MEWP; d) the operator's introduction to new or significantly different MEWP technology; e) the operator has been involved in an accident or near miss with the MEWP. <p>The evaluation will be accomplished through visual observation, at a minimum, which shall be documented for retention by the user.</p>			X							
<p>6.2.5 Familiarization</p> <p>6.2.5.1 Prior to user's authorization of an operator to use a specific model of MEWP, the user shall ensure the operator is familiarized on the following, and as specified by the manufacturer:</p> <ul style="list-style-type: none"> a) identification of the location for the manual(s) storage; b) requirement for confirmation that the required manual(s) specified by the manufacturer are with the MEWP; c) purpose and function of the controls specific to the model of MEWP to be used; d) features, limitations and devices; and e) operating characteristics specific to the model of the MEWP. <p>6.2.5.2 When authorized by the user, self-familiarization can be achieved, if authorized, by a properly trained operator reading, understanding and following the manufacturer's operator's manual.</p> <p>6.2.5.3 The user shall ensure that after familiarization, the operator operates the MEWP for a sufficient period of time to achieve proficiency.</p>			X							
<p>6.3 Assistance to Operators If a user is unable to answer an operator's question, such as rated capacity, intended use, maintenance, repair, inspection or operation of the MEWP, the user shall obtain the proper information from the dealer or manufacturer. The answer may also be obtained from a qualified person if the manufacturer is no longer in business.</p>			X							

American National Standard for the Safe Use of Mobile Elevating Work Platforms (MEWPs)

	MANUFACTURER	DEALER	OWNER	USER	SUPERVISOR	OPERATOR	OCCUPANT	LESSOR	LESEE	BROKER
<p>6.4 Before Operation</p> <p>To ensure the safe operation of MEWPs, the user shall direct their personnel to include supervisors of MEWP operations, operators and occupants of a MEWP to be aware of and comply with all provisions set forth in this standard including, but not limited to the following:</p> <ul style="list-style-type: none"> a) understanding of the task to be performed; b) selection of a MEWP appropriate for the task to be performed; c) knowledge of the possible hazards associated with the task, site, or environment and the means to safely deal with any such hazards; d) knowledge of the intended purpose and function of each control and items specified by the manufacturer; e) authorization by the user; f) stabilizing devices, such as outriggers, extendable axes, or other stability-enhancing means are used as required by the manufacturer; g) guardrails are installed and access gates or openings are closed or in appropriate positions per manufacturer's instructions; h) loads and their distribution on the work platform and any platform extension are in accordance with the manufacturer's rated load for that specific configuration; i) read and understand or have a qualified person explain the manufacturer's operating instruction(s) and user safety rules; j) read and understand or have a qualified person explain all decals, warnings, and instructions displayed on the MEWP; k) use of appropriate personal protective equipment for the conditions including the environment in which the MEWP will be operated; and l) ensuring that there is another qualified person on site, who is not working on the platform and knows how to use the emergency controls. 			X	X	X	X				
<p>6.5 Work Place Inspection</p> <p>Before and during the use of the MEWP, the user shall ensure and the operator shall perform a workplace inspection in the area in which the MEWP is used shall be checked for possible hazards, such as but not limited to:</p> <ul style="list-style-type: none"> a) drop-offs or holes, including those concealed by water, ice, mud, etc.; b) slopes; c) bumps, floor obstructions and electric cables; d) debris; e) overhead obstructions; f) electrical conductors; g) hazardous atmospheres and/or hazardous locations; h) surfaces inadequate to sustain the ground-bearing pressures imposed by the MEWP in all operating configurations; i) wind and weather conditions; j) presence of personnel and other mobile equipment; and k) traffic hazards. 			X							
<p>6.6 Prior to Each Operation</p> <p>The user shall ensure and the operator shall comply with, prior to each operation of the MEWP, the following:</p> <ul style="list-style-type: none"> a) stabilizing devices, such as outriggers, extendable axes, or other stability-enhancing means are used as required by the manufacturer; b) guardrails and access gates or openings are closed or in appropriate positions per manufacturer's instructions; c) loads and their distribution on the work platform and any platform extension are in accordance with the manufacturer's rated load for that specific configuration; d) all occupants of the MEWP shall receive instructions from the operator as defined in ANSI A92.24; e) personal fall-protection devices are used, when required. 			X	X	X	X	X			

American National Standard for the Safe Use of Mobile Elevating Work Platforms (MEWPs)

6.7 Understanding of Hazardous Atmosphere Locations

The user shall ensure that if a MEWP is to be used in a hazardous environment where flammable or explosive gases or particles are present, a MEWP designed/ designated for this environment shall be used as recommended by the manufacturer or a qualified person. The MEWP shall be in compliance with ANSI/NFPA Standard 505

6.8 Specific Requirements of Operation

6.8.1 Fall Protection

6.8.1.1 The guardrail system of the MEWP is the primary fall protection for occupants. When required to use personal fall protection, either fall restraint or fall arrest, operators and occupants shall comply with the instructions provided by the manufacturer regarding anchorage(s).

6.8.1.2 All group B MEWP operators and occupants shall use personal fall arrest or fall restraint systems at all times.

6.8.2 Weather Considerations

The user shall define and the operator shall comply with control measures to address the potential risk associated with weather conditions when operating MEWPs, to include conditions such as wind, lightning, ice, fog or any other weather condition that directly or indirectly affects the safe operation of a MEWP as appropriate. Control measures shall address Sections 6.8.2.1, 6.8.2.2, 6.8.2.3 and 6.8.2.4.

6.8.2.1 Effect of Wind Forces on MEWPs

MEWPs shall not operate in wind speed conditions beyond the maximum allowed by the manufacturer. No modifications or additions to the MEWP that affect its wind loading and consequently its stability shall be made without the manufacturer's approval. Where this approval cannot be obtained from the manufacturer, approval shall be obtained from an engineer.

6.8.2.2 Effect of Wind on Equipment in the Work Platform

Care shall be taken when handling building materials, sheet materials, panels and other such materials which can act as sails.

6.8.2.3 Local Wind Effects

The shielding and funneling effects of structures can cause high wind speeds and turbulence on days when the wind speed in open areas is low. Other sources of local high wind speed that shall be considered in relation to safety at worksites are at airports and along roadways.

6.8.2.4 Use in Thunderstorms

MEWPs shall not be used outdoors in a thunderstorm. MEWPs can be used inside of a building where the MEWP and operator are not subject to a lightning strike.

6.8.3 Ground Condition Considerations

The user shall identify potential hazards caused by ground conditions identified in Sections 6.8.3.1, 6.8.3.2, and 6.8.3.3 and provide the operator with warning and instructions. Operators shall comply with the instructions and notify their supervisor if additional potential hazards are identified during their workplace inspections and avoid the risk until directed otherwise by their supervisor.

6.8.3.1 General

The stability and safety of MEWPs are affected by poor ground conditions which can lead to the machine becoming out of level and unstable. The user shall ensure that the area where the MEWP is going to be used prior to operation be inspected and fully comply with all warnings and instructions provided by the manufacturer. If the level indicator indicates that the operating limits are nearing the MEWP's specified limits, then the operator shall lower and reset the MEWP in a level position.

6.8.3.2 Inadequate Outrigger Foundations

Some soil types, moist soils, and soils which have not been compacted as well as some improved surfaces (paved, concrete, compacted, etc.) are not capable of supporting the pressures of outrigger pads. In such cases, the user and operator shall determine and ensure that some form of foundation or spreader pad is required to reduce the ground pressure to an acceptable level. Spreader pads shall have sufficient size, stiffness and strength to spread the load over the required area.

	MANUFACTURER	DEALER	OWNER	USER	SUPERVISOR	OPERATOR	OCCUPANT	LESSOR	LESEE	BROKER
6.7 Understanding of Hazardous Atmosphere Locations			X							
6.8 Specific Requirements of Operation										
6.8.1 Fall Protection										
6.8.1.1 The guardrail system of the MEWP is the primary fall protection for occupants. When required to use personal fall protection, either fall restraint or fall arrest, operators and occupants shall comply with the instructions provided by the manufacturer regarding anchorage(s).						X	X			
6.8.1.2 All group B MEWP operators and occupants shall use personal fall arrest or fall restraint systems at all times.						X	X			
6.8.2 Weather Considerations										
The user shall define and the operator shall comply with control measures to address the potential risk associated with weather conditions when operating MEWPs, to include conditions such as wind, lightning, ice, fog or any other weather condition that directly or indirectly affects the safe operation of a MEWP as appropriate. Control measures shall address Sections 6.8.2.1, 6.8.2.2, 6.8.2.3 and 6.8.2.4.			X			X				
6.8.2.1 Effect of Wind Forces on MEWPs			X			X				
MEWPs shall not operate in wind speed conditions beyond the maximum allowed by the manufacturer. No modifications or additions to the MEWP that affect its wind loading and consequently its stability shall be made without the manufacturer's approval. Where this approval cannot be obtained from the manufacturer, approval shall be obtained from an engineer.			X			X				
6.8.2.2 Effect of Wind on Equipment in the Work Platform			X			X				
Care shall be taken when handling building materials, sheet materials, panels and other such materials which can act as sails.			X			X				
6.8.2.3 Local Wind Effects			X			X				
The shielding and funneling effects of structures can cause high wind speeds and turbulence on days when the wind speed in open areas is low. Other sources of local high wind speed that shall be considered in relation to safety at worksites are at airports and along roadways.			X			X				
6.8.2.4 Use in Thunderstorms			X			X				
MEWPs shall not be used outdoors in a thunderstorm. MEWPs can be used inside of a building where the MEWP and operator are not subject to a lightning strike.			X			X				
6.8.3 Ground Condition Considerations										
The user shall identify potential hazards caused by ground conditions identified in Sections 6.8.3.1, 6.8.3.2, and 6.8.3.3 and provide the operator with warning and instructions. Operators shall comply with the instructions and notify their supervisor if additional potential hazards are identified during their workplace inspections and avoid the risk until directed otherwise by their supervisor.			X			X				
6.8.3.1 General			X			X				
The stability and safety of MEWPs are affected by poor ground conditions which can lead to the machine becoming out of level and unstable. The user shall ensure that the area where the MEWP is going to be used prior to operation be inspected and fully comply with all warnings and instructions provided by the manufacturer. If the level indicator indicates that the operating limits are nearing the MEWP's specified limits, then the operator shall lower and reset the MEWP in a level position.			X			X				
6.8.3.2 Inadequate Outrigger Foundations			X			X				
Some soil types, moist soils, and soils which have not been compacted as well as some improved surfaces (paved, concrete, compacted, etc.) are not capable of supporting the pressures of outrigger pads. In such cases, the user and operator shall determine and ensure that some form of foundation or spreader pad is required to reduce the ground pressure to an acceptable level. Spreader pads shall have sufficient size, stiffness and strength to spread the load over the required area.			X			X				

American National Standard for the Safe Use of Mobile Elevating Work Platforms (MEWPs)

	MANUFACTURER	DEALER	OWNER	USER	SUPERVISOR	OPERATOR	OCCUPANT	LESSOR	LESEE	BROKER
<p>6.8.3.3 Sub-surface Voids Users and operators shall ensure that sub-surface voids such as cellars, basements, culverts and pipes shall be taken into consideration when determining the adequate strength required to support the MEWP in its operating configuration.</p>			X			X				
<p>6.8.4 Public Roads The user shall identify potential hazards caused by operations on public roads as identified in Section 6.8.4.1 and 6.8.4.2 and provide the operator with warning and instructions. Operators shall comply with the instructions and notify their supervisor if they identify additional hazards during their workplace inspections and avoid the risk until directed otherwise by their supervisor.</p>			X		X					
<p>6.8.4.1 When a MEWP is loaded/unloaded from a transporting vehicle on a public road, the users and operators shall ensure that appropriate measures are taken to protect the persons involved or affected. These measures may include but are not limited to:</p> <ul style="list-style-type: none"> a) warning cones; b) road signs and signalling devices; c) use of appropriate personal protective equipment, such as reflective clothing; d) flag personnel to warn other vehicles of the presence of the MEWP and any associated vehicles; e) compliance with local, state and federal regulations. 			X		X					
<p>6.8.4.2 When a MEWP travels between worksites, adequate protection or signalling to warn the public shall be provided to the operator by the user.</p>			X							
<p>6.8.5 Slope and Grade The user shall ensure and the operator shall comply with the requirement not to operate a MEWP on grades, slopes, ramps or cambers exceeding those for which the MEWP is rated by the manufacturer.</p>			X		X					
<p>6.8.6 Deployment of Stability-enhancing Means Users shall direct and the operators shall comply with the requirements to deploy and lock into place as required by the manufacturer any stabilizing devices such as outriggers, extendible axles, oscillating axles or other stability-enhancing means.</p>			X		X					
<p>6.8.7 Guardrail System Users shall direct and operators shall comply with the requirements to install and position guardrails, and that access gates or openings shall be properly closed or in appropriate positions per the manufacturer's instructions. The guardrails of the MEWP shall not be used to carry materials unless approved by the manufacturer and such materials shall not exceed the rated capacity of the platform.</p>			X		X					
<p>6.8.8 Distribution of Load Users shall direct and operators shall comply with the requirements for rated loads and their distribution on the MEWP and any MEWP extension(s) be in accordance with the manufacturer's requirements.</p>			X		X					
<p>6.8.9 Maintaining Overhead Clearance The operator shall ensure adequate clearance is maintained from overhead obstructions.</p>					X					
<p>6.8.10 MEWP Traveling</p>										
<p>6.8.10.1 Before Moving the Work Platform or MEWP The operator shall comply with the manufacturer's requirement for traveling, to include:</p> <ul style="list-style-type: none"> a) visually inspect the area around the platform for obstructions and check the direction of platform movement with reference to the indicators on the MEWP chassis, if applicable, and the controls before operating; and b) ensure that persons in the work site area are aware of the movement of the MEWP as required to protect against personal injury 					X					

American National Standard for the Safe Use of Mobile Elevating Work Platforms (MEWPs)

	MANUFACTURER	DEALER	OWNER	USER	SUPERVISOR	OPERATOR	OCCUPANT	LESSOR	LESEE	BROKER
<p>6.8.10.2 Moving or Traveling The operator shall:</p> <ul style="list-style-type: none"> a) maintain a clear view of the area continuously in the direction of movement, including above and below the work platform, maintain an adequate clearance distance from hazards and avoid any distractions; b) travel with the boom/platform positioned at the lowest safe position for the conditions; c) move at speeds that are appropriate for safe operation; d) allow for the platform movements due to the effects when traveling over uneven surfaces, slopes and ramps; e) allow for the distance the work platform may move or MEWP will travel before a complete stop after controls are released or returned to neutral position; f) not lean on or over the guardrails while the MEWP is elevating or traveling close to obstructions; g) not lean his/her body over the work platform control panel at any time; h) not place objects on the work platform control panel; and i) provide for the safety of any others in the work platform during any MEWP movement. 					X					
<p>6.8.10.3 While Working at Height The operator should use available devices to deactivate the controls on the work platform, whenever possible.</p>						X				
<p>6.8.11 Work Platform Materials The user shall ensure and the operator shall comply with the need for materials on the work platform floor to be secured and do not pose a hazard, to include while moving the MEWP.</p>			X		X					
<p>6.8.12 Electrical Hazards When working in the area of energized conductors the user shall direct and the operator shall comply with the requirements to:</p> <ul style="list-style-type: none"> a) Stay at least 10 feet away from power lines with any part of their body, conductive object or any part of the MEWP. b) If work requires working nearer than 10 feet, stop and consult a qualified person with respect to electrical transmission and distribution to have appropriate measures taken (such as de-energizing and grounding). c) If there is a question that the power lines may carry more than 50KV, consult a qualified person with respect to electrical transmission and distribution before proceeding. d) If working or approaching closer than explained above, it shall only be done by a qualified person with respect to electrical transmission and distribution. Only qualified persons may work on electric circuit parts or equipment that has not been de-energized. Such persons shall be capable of working safely on energized circuits and shall be familiar with the proper use of special precautionary techniques, personal protective equipment, insulating and shielding materials and insulated tools. 			X		X					
<p>6.8.13 Footing for Personnel The user shall direct the operator and occupants shall comply with maintaining a firm footing on the MEWP platform floor at all times while working thereon. Climbing by occupants on the toe board, mid-rail or top-rail of the MEWP is prohibited. The use of planks, ladders, or any other devices on the work platform for achieving additional height or reach is prohibited.</p>			X		X	X				
<p>6.8.14 Precautions for Other Moving Equipment</p>										
<p>6.8.14.1 When other moving equipment and vehicles are present, users shall direct and operator shall comply with the requirements for special precautions to be taken to comply with local ordinances or safety standards established for the workplace. Warnings, such as but not limited to flags, roped-off areas, flashing lights, traffic cones and barricades, shall be used as appropriate.</p>			X		X					
<p>6.8.14.2 When a MEWP is to be operated in conjunction with a crane or some other moving equipment, the user shall ensure the MEWP operation is properly planned and a safe system of work developed and coordinated with operation of the other moving equipment. The operator shall be instructed in how to deal with any foreseeable emergencies.</p>			X		X					

American National Standard for the Safe Use of Mobile Elevating Work Platforms (MEWPs)

	MANUFACTURER	DEALER	OWNER	USER	SUPERVISOR	OPERATOR	OCCUPANT	LESSOR	LESEE	BROKER
6.8.15 Reporting Problem(s) or Malfunction(s) The operator shall immediately cease operation of the MEWP and report to the user any problem(s) or malfunction(s) that become evident during operation. The user shall ensure, by consulting a qualified person if necessary, that all problem(s) or malfunction(s) that affect the safety of operations are repaired prior to continued use.			X		X					
6.8.16 Reporting Potentially Hazardous Locations and/or Hazardous Atmospheres The operator shall immediately cease operation of the MEWP and report to user any potentially hazardous location(s) and/or hazardous atmospheres.					X					
6.8.17 Hazardous Location Operation and/or Hazardous Atmospheres The user shall determine the hazard classification of the intended location of operation. Operation of a MEWP not approved and marked for operation in a hazardous location and/or hazardous atmospheres, such as one having potentially flammable or explosive gases or particles, shall be prohibited. The operator shall immediately report to a supervisor any potentially hazardous location(s) that become evident during operation.			X		X					
6.8.18 Entanglement Care shall be taken to prevent rope, electric cables and hoses, etc., from becoming entangled in the MEWP or adjacent structure or objects. Users shall avoid these applications, if possible, and operators shall take precautions to avoid entanglement during operation.			X		X					
6.8.19 Load Transfer Users shall plan task and instruct operators when adding materials or personnel loads to the work platform and ensure the work platform rated load is not exceeded. Operators shall comply with instructions and verify during operations that the rated work load is not exceeded. Note: Load sensing system may not provide protection in these situations.			X		X					
6.8.20 Work Area The operator shall ensure that the area surrounding the MEWP is clear of persons and equipment before any movement of the MEWP.					X					
6.8.21 Ventilation The user shall ensure that proper ventilation is provided in enclosed areas where internal combustion powered equipment is used. Proper ventilation requirements shall be determined by a qualified person. Operators shall verify compliance with their supervisor if work with a MEWP is required in enclosed areas.			X		X					
6.8.22 Fuelling The user shall direct and the operator shall comply with the requirements to, if applicable, shut down the MEWP engine while fuel tanks are being filled. Fueling shall be done in a well-ventilated area free of flame, sparks or other hazards that may cause fire or explosion.			X		X					
6.8.23 Battery Charging Batteries can produce explosive gas when being charged. The user shall direct and the operator shall comply with the requirements to charge batteries in a well-ventilated area free of flame, sparks or other hazards that may cause fire or explosion.			X		X					
6.8.24 Improper MEWP Stabilization The user shall direct and the operator shall comply with the requirements not to position the MEWP against, tied to or restrained by another object to steady the platform or improve stability.			X		X					
6.8.25 Misuse as a Crane The user shall direct and the operator shall comply with the requirements not to use the MEWP as a crane unless specifically approved by the manufacturer.			X		X					
6.8.26 Use of MEWP for Grounding The user shall direct and operator shall comply with the requirement that the MEWP shall not be used for electrical grounding to earth when welding structures alongside it unless specifically approved by the manufacturer.			X		X					
6.8.27 Climbing the Extending Structure The user shall direct and the operator shall comply with the requirement to never climb on the MEWP extending structure.			X		X					

American National Standard for the Safe Use of Mobile Elevating Work Platforms (MEWPs)

	MANUFACTURER	DEALER	OWNER	USER	SUPERVISOR	OPERATOR	OCCUPANT	LESSOR	LESEE	BROKER
<p>6.8.28 Unusual Operating Support Conditions The user shall direct and the operator shall comply with requirement to not operate a MEWP, except for loading and unloading purposes, from a position on trucks, trailers, railway cars, floating vessels, and scaffolds or similar equipment unless the application and the method are approved in writing by the manufacturer.</p>			X		X					
<p>6.8.29 Stunt Driving Operators are prohibited from stunt driving, horseplay and reckless operations.</p>					X					
<p>6.8.30 Unauthorized Use</p>										
<p>6.8.30.1 The user shall direct and the operator shall comply with the means provided to protect against use by any unauthorized person(s).</p>			X		X					
<p>6.8.30.2 The operator shall not provide the MEWP to another person or entity for any use without the authorization of the user.</p>					X					
<p>6.8.31 Altering and Disabling The user shall direct and the operator shall comply with the requirement to not alter or disable MEWP limiting and indicating devices required by the manufacturer.</p>			X		X					
<p>6.8.32 Snagged Platform If the work platform, extension or elevating assembly becomes caught, snagged or otherwise prevented from normal motion by adjacent structures or other obstacles such that control reversal does not free the platform, users and operator shall ensure that all operators and occupants are removed from the work platform before attempts are made to free the platform using ground controls.</p>			X		X					
<p>6.8.33 Exiting (or Entering) a MEWP at Height MEWPs are not specifically designed to transfer personnel from one level to another or for leaving the work platform. Exiting (or entering) a MEWP at height shall only be permitted through a procedure provided by the manufacturer or qualified person that addresses the following:</p> <ul style="list-style-type: none"> a) fall prevention of persons during transfer from the work platform to the structure; b) fall prevention of tools and materials during transfer from the work platform to the structure; c) sudden movement of the MEWP or work platform; d) additional loads or changing of loads imposed on the MEWP for which it was not designed which could affect stability or overload the machine; e) dynamic and impact loads from personal fall protection equipment; f) damage to the MEWP or structure by an unintentional movement of the MEWP; g) stranding of people; h) use of extending decks and gates; i) use of single or double lanyards; j) access and maintenance of required fall protection for persons while they are on the structure; k) distance between transfer surfaces, both horizontally and vertically; l) potential for movement of the MEWP platform due to changing loads; and m) compliance with the local authority having jurisdiction. <p>Users shall direct and operators and occupants shall comply with approved procedures for this operation.</p>			X		X	X				
<p>6.8.34 Safe Carrying of Materials The user shall direct and the operator shall comply with allowing only properly secured tools and materials which are evenly distributed and can be safely handled by a person(s) working from the work platform, are moved. Carrying materials larger than the platform shall be prohibited unless approved by the manufacturer.</p>			X		X					

American National Standard for the Safe Use of Mobile Elevating Work Platforms (MEWPs)

	MANUFACTURER	DEALER	OWNER	USER	SUPERVISOR	OPERATOR	OCCUPANT	LESSOR	LESEE	BROKER
6.8.35 Carrying Materials Outside the Work Platform The user shall direct and the operator shall comply with the requirement that carrying materials outside the work platform is prohibited, except when using a carrier designed for the intended purpose and with written authorization from the manufacturer.			X			X				
6.8.36 Allowable Rated Forces The user shall direct and the operator shall comply with the requirements to not exceed any of the rated forces allowed by the manufacturer, such as rated horizontal forces and dynamic and impact loads from operations.			X			X				
6.8.37 Misuse as a Jack The user shall direct and the operator shall comply with the requirements that the MEWP shall not be used as a jack, prop, or a tie to support itself, other structures or machines unless the user obtains written approval from the manufacturer for the use of the MEWP for that purpose, or obtains a written procedure from an engineer for each specific case where a MEWP is used for that purpose.			X			X				
6.8.38 Moving Overhead Obstructions The user shall direct and the operator shall comply with required steps to take when an MEWP operates within the area of moving overhead obstructions to prevent a collision with the MEWP.			X			X				
6.8.39 Parking of the MEWP The user shall direct and operator shall comply with the requirements in the proper procedures to park the MEWP at the end of daily work to include at a minimum the requirements of Sections 6.8.39.1 and 6.8.39.2.			X			X				
6.8.39.1 Wherever possible, MEWPs should be parked in a secure compound or in a supervised area inaccessible to unauthorized persons. Keys shall be removed from the MEWPs when not in use. Keys should be issued only to authorized operators and retained by them until the end of the work period.			X			X				
6.8.39.2 On completion of work, the MEWP shall be parked in the designated area with the engine or motor switched off, the work platform lowered to its stowed position and the brakes applied. The MEWP shall not be left unattended in the elevated position unless approved by the manufacturer.			X			X				
7 TRANSPORT										
The user shall direct and operator shall comply with the requirement that the MEWP, including its stabilizing devices, shall be in the manufacturer's recommended configuration when being transported.			X			X				

American National Standard establishing Training Requirements for the Use, Operation, Inspection, Testing and Maintenance of Mobile Elevating Work Platforms (MEWPs)

MANUFACTURER
DEALER
OWNER
USER
SUPERVISOR
OPERATOR
OCCUPANT
LESSOR
LESEE
BROKER

4 SAFE USE OF THE MEWP															
Safe use of a MEWP when training is being administered shall be in compliance with ANS/SAIA A92.22.															
5 REQUIREMENTS FOR TRAINING, FAMILIARIZATION AND AUTHORIZING OPERATORS															
5.1 This training shall be provided to MEWP operators and their supervisors and include the inspection, maintenance, use, application, and operation of MEWPs. Supervisors of MEWP operators shall also complete training as specified in Section 6.5 of this Standard.									X						
5.2 Only personnel properly trained in compliance with this Standard and who have received unit-specific familiarization shall operate a MEWP. The user shall determine if personnel are qualified to operate the MEWP prior to authorization.									X						
5.3 Training shall be required for each of the classifications of MEWP (see clause 1.1.3, pg. 8).															
6 RESPONSIBILITY FOR TRAINING AND FAMILIARIZATION															
6.1 General															
Only personnel who have received training in compliance with this Standard regarding the inspection, application and operation of MEWPs (including recognition and avoiding of hazards associated with their operation) shall be authorized to operate a MEWP. Manufacturers, dealers, owners, users, supervisors, operators, occupants, lessors, lessees and brokers shall comply with their responsibility to support training and familiarization requirements defined in this Standard. NOTE: An entity's responsibilities may change depending on its role. For example, a manufacturer is a user when its employees are operating a MEWP in its care, control and custody.		X	X	X	X	X	X	X	X	X	X	X	X	X	X
6.2 Manufacturer															
6.2.1 The manufacturer shall develop and offer training materials that will aid dealers, owners, users, supervisors, operators, and occupants to comply with their responsibilities for training and familiarization as outlined in this Standard.		X													
6.2.2 When a manufacturer sells, rents or leases a MEWP directly to an owner or user, the manufacturer will assume the responsibilities of the dealer as outlined in this standard.		X													
6.2.3 Manufacturer, upon request, shall offer familiarization at delivery to the person designated by the receiving entity for receiving the MEWP, unless the new owner has made alternate arrangements.		X													
6.3 Dealer and Owner															
6.3.1 A dealer or owner shall train and familiarize or have proof of training and familiarization for all of their employees whom they authorize to operate a MEWP.			X		X										
6.3.2 When a dealer or owner sells, leases, rents, or otherwise provides a MEWP for any form of beneficial use, when requested by the user the dealer or owner shall offer operator training or advise the user where training can be obtained.			X		X										
6.3.3 When requested by the user, dealers and owners shall offer familiarization to the person designated to receive the MEWP.			X		X										
6.4 User															
All users of MEWPs shall either train and familiarize or ensure that personnel whom they authorize as operators, supervisors and occupants have been trained and familiarized in accordance with this standard. Users shall retain records of training in accordance with this Standard.						X									
6.5 Supervisor															
All personnel that directly supervise MEWP operators shall receive training identified in this standard for the "Supervisor" (see section 7.5).							X								
6.6 Operator															
The operator shall only operate MEWPs that they are authorized, trained and have been familiarized to operate.									X						

American National Standard establishing Training Requirements for the Use, Operation, Inspection, Testing and Maintenance of Mobile Elevating Work Platforms (MEWPs)

	MANUFACTURER	DEALER	OWNER	USER	SUPERVISOR	OPERATOR	OCCUPANT	LESSOR	LESEE	BROKER
6.7 Occupant MEWP occupants other than operators shall receive instruction identified in this Standard for the "Occupant" (see section 7.4).							X			
6.8 Familiarization Familiarization shall be conducted in accordance with the requirements of ANSI/SAIA A92.22, Section 6.2.5.			X							
6.9 Retraining										
6.9.1 The user shall designate a qualified person to monitor, supervise and evaluate operators on a regular basis to ensure their proficiency. Examples of situations when retraining would be necessary include, but are not limited to: a) expiration of the operator's valid training period; b) deterioration of the operator's performance; c) the operator's extended period of time with no operation of a MEWP; d) the operator's introduction to new or significantly different MEWP technology; e) the operator's involvement in an accident or near miss with the MEWP.			X							
6.9.2 The evaluation will be accomplished through visual observation, at a minimum, which shall be documented for retention by the user.			X							
7 TRAINING CONTENT										
7.1 General										
7.1.1 Training shall include both theory (classroom/online) training and practical (hands-on) operation and evaluation.										
7.1.2 The user shall ensure that training is presented in a manner that trainees can understand.			X							
7.2 Contents of Theory (Classroom/Online) Training Theory (classroom/online) training shall include MEWP safe use as defined in A92.22, and shall also include the following: a) the selection of appropriate MEWPs from the various classifications including available options; b) the purpose and use of operation manuals, placards and decals, and safety rules; c) understanding that operation manuals are an integral part of the MEWP and need to be stored properly in the weather-resistant compartment on the MEWP when not in use; d) validation that annual inspection is current on the placard when present on the MEWP; e) knowledge of how to perform a pre start inspection; f) responsibilities associated with problems or malfunctions affecting the operation of the MEWP; g) knowing and understanding factors affecting stability; h) recognition and avoidance of hazards associated with operation; i) knowing and understanding workplace inspections and that they must be performed prior to each use; j) knowing and understanding wind hazards and weather conditions; k) thorough understanding of the intended purpose and function of the MEWP controls, including platform, ground, and emergency descent controls; l) general knowledge of various MEWPs and features and devices specified by the MEWP manufacturer to include physical characteristics and other machine options; m) applicable regulations, standards and safety rules; n) use of personal protective equipment (PPE) appropriate to the task, worksite and environment and those required by the manufacturer; o) safe traveling practices.										

A92.24 Training Requirements for the Use, Operation, Inspection, Testing and Maintenance of Mobile Elevating Work Platforms (MEWP)

American National Standard establishing Training Requirements for the Use, Operation, Inspection, Testing and Maintenance of Mobile Elevating Work Platforms (MEWPs)

	MANUFACTURER	DEALER	OWNER	USER	SUPERVISOR	OPERATOR	OCCUPANT	LESSOR	LESEE	BROKER
<p>7.2 Contents of Theory (Classroom/Online) Training (continued) Theory (classroom/online) training shall include MEWP safe use as defined in A92.22, and shall also include the following:</p> <ul style="list-style-type: none"> p) issues associated with transport (if appropriate); q) understanding that authorization by the user is required to operate MEWP; r) understanding that securing the MEWP from unauthorized use is required; s) the requirement for familiarization in addition to training; t) understanding of hazardous location(s) (flammable or explosive atmospheres); u) warnings and instructions; v) familiarity with the requirements of operators; w) the dangers associated with high pressure systems; x) the responsibility of operator to inform platform occupants of applicable regulations, standards and safety rules and the requirements of section 7.4. y) other subjects required by the MEWP manufacturer. 										
<p>7.3 Contents of Practical (Hands On) Training Under direction and evaluation of the qualified trainer, the trainee shall operate the MEWP for a sufficient period of time to demonstrate proficiency regarding the following:</p> <ul style="list-style-type: none"> a) walk around and familiarization with MEWP; b) major components – identification and function; c) perform pre-start inspection – carry out daily checks and inspections; d) planning the route of travel and worksite inspection; e) setting the MEWP for work (if applicable); f) operation and function of all controls – completing course tasks; g) parking and securing the MEWP. 										
<p>7.4 Occupant Knowledge 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:</p> <ul style="list-style-type: none"> a) the requirement to use fall protection and the location of fall protection anchors; b) factors including how their actions could affect stability; c) safe use of MEWP accessories they are assigned to use; d) site-specific work procedures the occupants must follow related to the operation of the MEWP; e) hazards related to the task at hand and their avoidance, to include any applicable site risk assessment; f) 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 (see NOTE); and g) manufacturer's warnings and instructions. <p>NOTE: The requirements in item f) above need only to be conveyed to at least one other occupant.</p>						X	X			

A92.24 Training Requirements for the Use, Operation, Inspection, Testing and Maintenance of Mobile Elevating Work Platforms (MEWP)

American National Standard establishing Training Requirements for the Use, Operation, Inspection, Testing and Maintenance of Mobile Elevating Work Platforms (MEWPs)

	MANUFACTURER	DEALER	OWNER	USER	SUPERVISOR	OPERATOR	OCCUPANT	LESSOR	LESEE	BROKER
7.5 Supervisor Training										
Users shall ensure personnel that directly supervise MEWP operators are trained in the following:										
a) proper selection of the correct MEWP for the work to be performed;										
b) the rules, regulations and standards that apply to MEWPs, including the provisions for safe use as defined in ANSI A92.22, training and familiarization, and the work being performed;										
c) potential hazards associated with use of MEWPs and the means to protect against identified hazards;										
d) knowledge that the manufacturer's operation manuals are an integral part of the MEWP and need to be stored properly in the weather-resistant compartment on the MEWP.										
8 ADMINISTRATION OF TRAINING										
8.1 Trainers										
All training shall be delivered by a qualified person who is experienced with the particular classification of MEWP and knowledgeable regarding the laws, regulations, safe use practices, manufacturer's requirements, and recognition and avoidance of hazards associated with MEWPs.										
8.2 Curriculum										
The curriculum for the operator training shall incorporate the topics and subjects listed in Section 7 Training content. The curriculum shall clearly identify that training covers only the classification for the MEWP(s) included in the training (see Section 1.1.3, pg. 8).										
8.3 Training Environment										
8.3.1 The environment where training occurs should be free from hazards and supportive to learning.										
8.3.2 The classroom training environment should incorporate proper lighting and acoustics, room size and capacity to accommodate the number of trainees, heating and air conditioning, presentation equipment, visibility for all trainees of the presentation, and rest room facilities.										
8.3.3 The practical (hands-on) training environment should be free from other moving equipment and personnel traffic. Warnings such as flags, roped off areas, barricades, or flashing lights shall be used when appropriate. A risk assessment should be made for each location where a practical test is to be given to identify and eliminate or mitigate all hazards and risks associated with safe use of the MEWP.										
8.4 Testing										
To demonstrate competency, each trainee shall show proficiency in both theory (classroom/online) and practical (hands-on). Results of the theory (classroom/online) and practical (hands-on) evaluations shall be documented. (See Appendix A-D for examples.)										
8.5 Personal Documentation of Training										
Upon successful completion of the training program, the user shall be furnished with proof of training by the training entity referencing compliance with this standard. Documentation shall be issued with the following information:										
a) name of the entity providing training or retraining;										
b) name of the trainer;										
c) clear identification of the classification of MEWP covered in training;										
d) date of training completion;										
e) name of trainee;										
f) period of time training is valid (if applicable).										
NOTE: See example of MEWP Operator Certificate in Appendix E.										
				X	X					

American National Standard establishing Training Requirements for the Use, Operation, Inspection, Testing and Maintenance of Mobile Elevating Work Platforms (MEWPs)

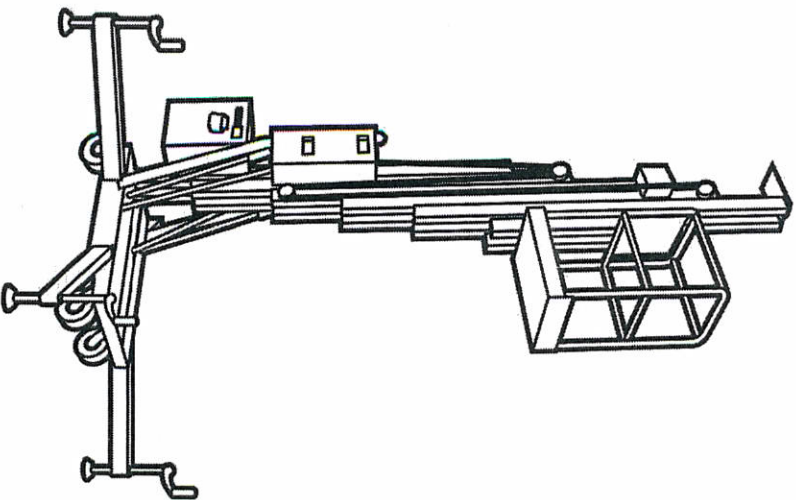
8.6 Record Retention

The following training records shall be dated and retained by the user for at least the period of time the training is valid and the familiarization records will be retained for at least four years: a) name of the entity providing training or retraining;

- a) name of person(s) trained or retrained and MEWP classifications;
- b) name of entity providing the training;
- c) name of person(s) delivering the training;
- d) name of person(s) receiving familiarization and MEWP make and model;
- e) name of person(s) providing familiarization.

	MANUFACTURER	DEALER	OWNER	USER	SUPERVISOR	OPERATOR	OCCUPANT	LESSOR	LESEE	BROKER
				X						

A.1 Examples of Type 1, Group A MEWPs

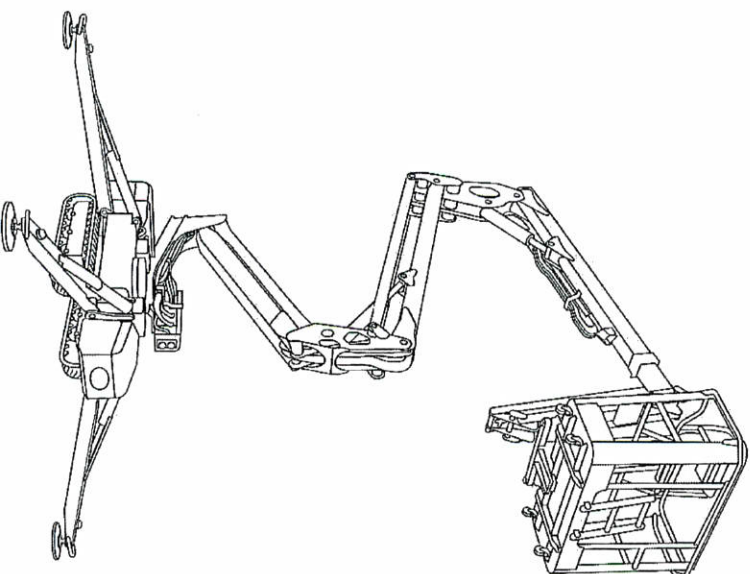


Type 1 MEWP: MEWP for which travelling is allowed only when in the stowed position.

Note: Refer to Section 11.3 MEWP Classification for application of groups and types.

Group A: MEWPs on which the vertical projection of the center of the platform area, in all platform configurations at the maximum chassis inclination specified by the manufacturer, is always inside the tipping lines.

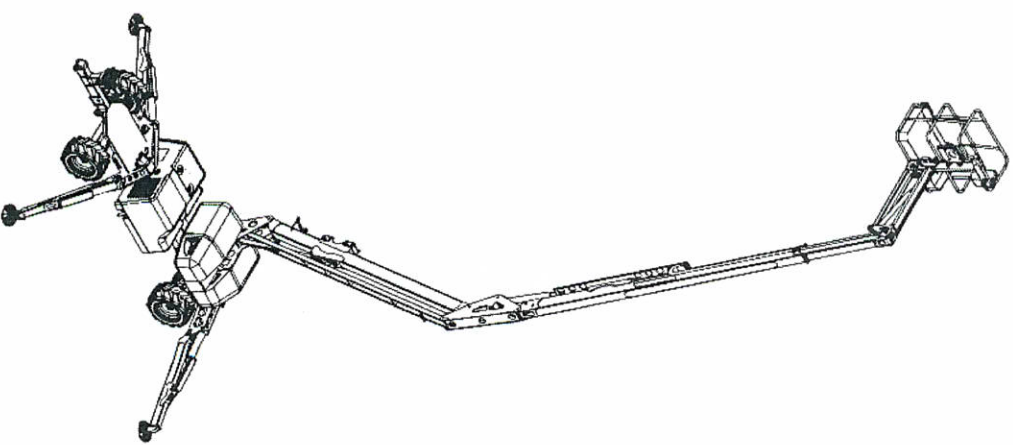
A.2 Examples of Type 1, Group B MEWPs



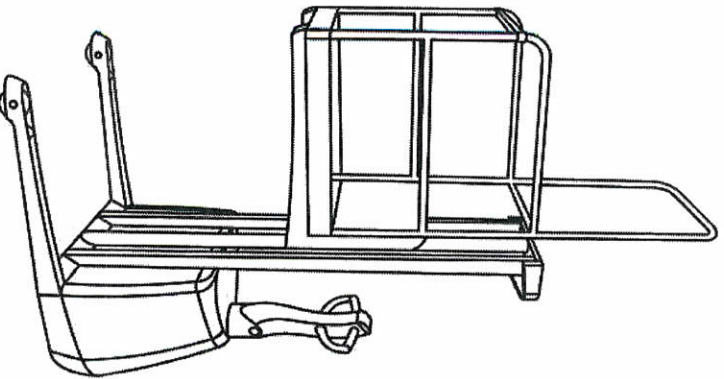
Type 1 MEWP: MEWP for which travelling is allowed only when in the stowed position.

Note: Refer to Section 11.3 MEWP Classification for application of groups and types.

Group B: MEWPs not in Group A.



A.3 Examples of Type 2, Group A MEWPs

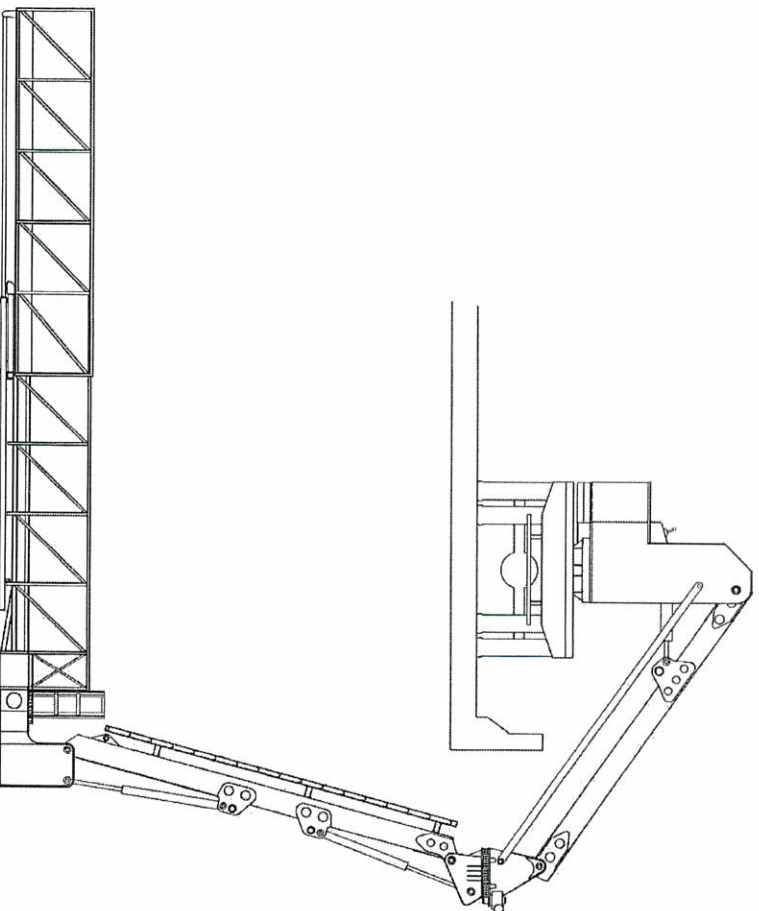


Type 2 MEWP: MEWP for which travelling with the work platform in the elevated travel position is controlled from a point on the chassis.

Note: Type 2 and type 3 MEWPs can be combined.

Group A: MEWPs on which the vertical projection of the center of the platform area, in all platform configurations at the maximum chassis inclination specified by the manufacturer, is always inside the tipping lines.

A.4 Examples of Type 2, Group B MEWPs

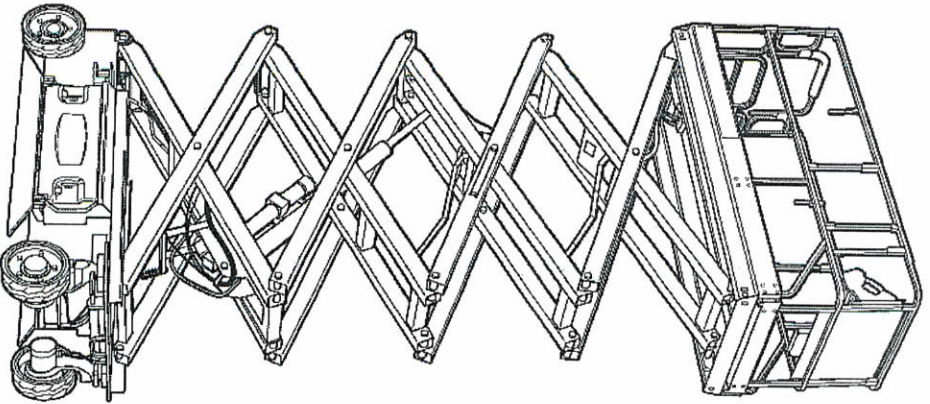


Type 2 MEWP: MEWP for which travelling with the work platform in the elevated travel position is controlled from a point on the chassis.

Note: Type 2 and type 3 MEWPs can be combined.

Group B: MEWPs not in Group A.

A.5 Examples of Type 3, Group A MEWPs

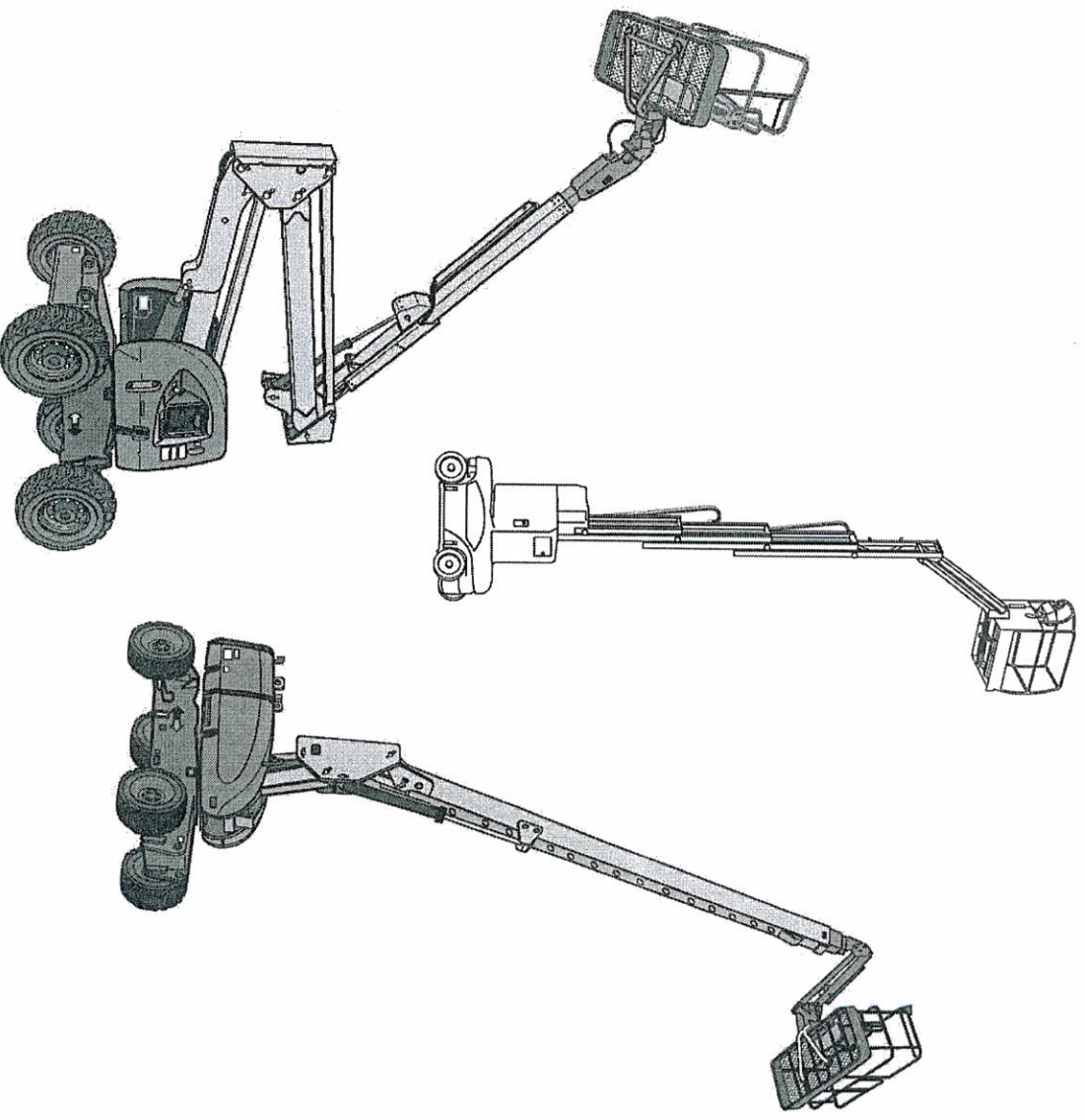


Type 3 MEWP: MEWP for which travelling with the work platform in the elevated travel position is controlled from a point on the work platform.

Note: Type 2 and type 3 MEWPs can be combined.

Group A: MEWPs on which the vertical projection of the center of the platform area, in all platform configurations at the maximum chassis inclination specified by the manufacturer, is always inside the tipping lines.

A.6 Examples of Type 3, Group B MEWPs



Type 3 MEWP: MEWP for which travelling with the work platform in the elevated travel position is controlled from a point on the work platform.

Note: Type 2 and type 3 MEWPs can be combined.

Group B: MEWPs not in Group A.