

ANSI/SAIA A92.22 – 2020

Safe Use
of
Mobile Elevating Work Platforms
(MEWPs)



Additional information on ANSI/SAIA A92.22-2020
can be found at www.saiaonline.org/a92



ANSI/SAIA A92.22-2020

Date of Publication: May 15, 2020

This Standard will become effective: June 1, 2020

This Standard was approved by the American National Standards Institute: May 7, 2020

The effective date is established by the standards developer and not by the American National Standards Institute.

This Standard was developed under procedures accredited as meeting the criteria for American National Standards (ANS). The Consensus Committee that approved the Standard was balanced to assure that individuals from competent and concerned interests have had an opportunity to participate. The proposed Standard was made available for public review and comment which provides an opportunity for additional public input from industry, academia, regulatory agencies, and the public at large.

The Scaffold & Access Industry Association, Inc. (SAIA) does not “approve,” “rate,” or “endorse” any item, construction, proprietary device or activity.

The Scaffold & Access Industry Association, Inc. (SAIA) does not take any position with respect to the validity of any patent rights asserted in connection with any items mentioned in this document and does not undertake to ensure anyone utilizing a standard against liability for infringement of any applicable Letters Patent, nor assume any such liability. Users of this Standard are expressly advised that the determination of the validity of any such patent rights, and the risk of the infringement of such rights, is entirely their own responsibility.

Participation by federal agency representative(s) or person(s) affiliated within the industry is not to be interpreted as government or industry endorsement of this standard.

The Scaffold & Access Industry Association, Inc. (SAIA) accepts responsibility for only those interpretations issued in accordance with governing ANSI Essential Requirements which preclude the issuance of interpretations by individual volunteers.

**ANSI/SAIA
A92.22-2020**

**AMERICAN NATIONAL STANDARD
for the
SAFE USE of
MOBILE ELEVATING
WORK PLATFORMS
(MEWPs)**

Secretariat
Scaffold & Access Industry Association, Inc.

Approved May 7, 2020
American National Standards Institute, Inc.

American National Standard

Approval of an American National Standard requires verification by ANSI that the requirements for due process, consensus, and other criteria for approval have been met by the standards developer.

Consensus is established when, in the judgment of the ANSI Board of Standards Review, substantial agreement has been reached by directly and materially affected interests. Substantial agreement means much more than a simple majority, but not necessarily unanimity. Consensus requires that all views and objections be considered, and that a concerted effort be made toward their resolution.

The use of American National Standards is completely voluntary; their existence does not in any respect preclude anyone, whether he has approved the standard or not, from manufacturing, marketing, purchasing, or using products, or procedures not conforming to the standards.

The American National Standards Institute does not develop standards and will in no circumstances give an interpretation of any American National Standard. Moreover, no person shall have the right or authority to issue an interpretation of an American National Standard in the name of the American National Standards Institute. Requests for interpretations should be addressed to the secretariat or sponsor whose name appears on the title page of this standard.

CAUTION NOTICE: This American National Standard may be revised or withdrawn at any time. The procedures of the American National Standards Institute require that action be taken to reaffirm, revise, or withdraw this standard no later than five years from the date of approval. Purchasers of American National Standards may receive current information on all standards by calling or writing the American National Standards Institute.

Published by

Scaffold & Access Industry Association Inc.
400 Admiral Boulevard Kansas City, MO 64106
816.595.4860 • www.saiaonline.org

Copyright ©2020 by the Scaffold & Access Industry Association Inc.
All rights reserved.

No part of this publication may be reproduced in any form, in an electronic retrieval system or otherwise, without the prior written permission of the publisher.

Printed in the United States of America

© 2020 SAIA – All Rights Reserved

Foreword (This foreword is not part of American National Standard for A92.22-2020)

This standard is one of a series on Mobile Elevating Work Platforms developed under the committee procedures of the American National Standards Institute. The accredited A92 standards committee was organized by the Institute in 1948. The Scaffold & Access Industry Association Inc. serves as Secretariat.

The primary objective of this standard is to define rules for safeguarding persons and objects against the risk of accident associated with the operation of mobile elevating work platforms (hereafter referred to as MEWPs).

Interpretations and Suggestions for Improvement

All inquiries requesting interpretation of the Committee’s approved American National Standards shall be in writing and directed to the Secretariat. The A92 Committee shall approve the interpretation before submission to the inquirer. No one but the A92 Committee is authorized to provide any interpretation of this standard.

All requests for interpretation and all suggestions for improvement shall be forwarded in writing to the ASC A92 Committee, c/o Secretariat ~ Scaffold & Access Industry Association, 400 Admiral Boulevard, Kansas City, MO 64106.

The A92 Committee solicits comments on and criticism of the requirements of the standards. The standards will be revised from time to time when necessary or desirable, as demonstrated by the experience gained from the application of the standards. Proposals for improvement of this standard will be welcome. Proposals should be as specific as possible, citing the paragraph number(s), the proposed wording, and a detailed rationale for the proposal including any pertinent documentation.

Revisions to A92.22-2022

The ANSI/SAIA A92.22-2020 contains revisions to eliminate Commercial Term Violations. Further clarification on the revisions can be found at www.saiaonline.org/a92.

This Standard was processed and approved for submittal to ANSI by Accredited Standards Committee A92 - Aerial Platforms. The ASC A92 Main Committee’s approval of the standard does not necessarily imply that all committee members voted for its approval. At the time the ASC A92 committee approved this standard, the A92 - Aerial Platforms Committee had the following members:

- Josh Chard, Chairman
- Francis Bonesteel, Vice-Chairman
- DeAnna Martin, A92 Liaison

Organization Represented	Name of Representative
Alimak Group USA, Inc.	Gregory Janda Tony Dragone
Allied Insurance Brokers	Cameron Boots
Altec Industries Inc.....	Bryan Hall Robert Crowder
Altec Neuco.....	Butch Barron Eric Lumberg

American Rental Association	John McClelland Kevin Gern
Arrowhead Aerial Products, Inc	Sharon McCarty
Arrowhead Product Development, Inc	Gary Werkhoven
Aspen Aerials, Inc.	Patrick Clark Justin Laskowski
Association of Equipment Manufacturers (AEM)	Jeff Jurgens
Beta Max Inc.	
Blazing Technologies	Robert Backer
Bonesteel Construction Company	Frank Bonesteel
BrandSafway	Don Allen
Brent Hoover LLC	Brent Hoover
Brewington & Company	John Brewington
CED Technologies, Inc.	George Wharton
Century Elevators.....	Paula Manning
CPWR The Center for Construction Research and Training	Michael Kassman Gary Gustafson
Diversified Inspections/ ITL.....	Jerry Tanner Ralph Goodwin
Duke Energy Carolina East.....	David Benson Sammy Nifong
Duke Energy Florida	Donald Barrows
Dur-A-Lift Inc.	Douglas Brinkhous
Eckstine and Associates, Inc.	Dennis Eckstine Matthew Eckstine
Elliott Equipment Company.....	Alan Calta Matt Gill
Entergy	James Labudde
EPRO Safety Solutions	Albert Eccles
Equipment Consultant Services Unlimited Inc.	Bradley Nester
Equipment Technology LLC.....	Bobby Taylor Will Urban
Eric A. Schmidt, P.E.	Eric Schmidt
Evulich & Associates.....	Barris Evulich
ExxonMobil.....	Frank Radio
EZ Scaffold.....	James Hinton
Florida Power and Light Company.....	Glenn Martin
Fraco Products Ltd.	Francois Villeneuve Shanon Beekman
Genie Industries	Jason Berry Harrison Jenkins
Global Rentals.....	Joshua Chard
Global Safety & Equipment Inc.	Geoffrey Arther
H&E Equipment Services, Inc.	Frankie Wynn
Haulotte Group.....	Kevin Gildea, PE
Heath and Associates	Frederick Heath
Herc Rentals	Bill Cobb
Herc Rentals	Michael Hayden Jr.
Hubbell Power Systems, Inc.	Dustin Sullivan
Hugg & Hall Equipment.....	Bob Hendricks
Hy-Brid Lifts/ Custom Equipment.....	Ben Froland Terry Dolan
Hydro Mobile Inc.	Kevin O'Shea

IBEW Local 164	Sony Trudel Michael DeGiglio
International Masonry Institute (IMI)	David Wysocki
IPAF, Ltd.	Tony Groat Dan Moss
IREX Contracting Group	Tom Pokornik
IVES Training & Compliance Group Inc.....	Robert Vetter
JDB Equipment Company Inc.....	David Sexton
JLG Industries Inc.	Stephen Forgas
Mark Vaughn	
KHL Group/Access, Lift & Handlers Magazine	Tony Radke
Klimer Platforms Inc.	James Gordon
Lee Electrical Construction Inc.	John Cook Jason Lee
Lewis Tree Service.....	Chris Maka Samuel Luna
Lift-A-Loft Corporation.....	Chris Barefoot
McClain & Co., Inc.	Daniel McClain
MEC Aerial Work Platforms	Gary Crook Mark Kroeker
Merrifield Safety Consulting LLC	Dave Merrifield
MEWPs Inc.	Richard Staples Scott Loura
ML Cranes & Equipment	Mickey Hodges
Moog USA Inc.	Christina Moog Cindy Watson
Niftylift Inc.....	Steven Redding James Clare
OEM Controls, Inc.....	Paul Rohaly Robert Wuertz
Parker - Helac	Carl Kishline
Pepco	Christopher Hughes
Phenix Technologies.....	Mark Miller
Pike Electric, LLC.....	Andy Cleary Kevin Watson
Piranha Safety.....	Eric Moran Homer Kyle
Power Equipment Leasing Co, Inc.....	Tracy Schroeder
ReechCraft Inc.	Jason Solhjem Shane Nickel
Reynolds Engineering Services Inc.	Stephen Reynolds
RLH Consulting LLC	Richard Hoffelmeyer
Salt River Project (SRP).....	Brendan King
Scaffold Resource, LLC	Brett Friedel
SEA, LTD	Brian Boggess
Skyjack Inc.	Ian McGregor
Snorkel International LLC.....	Jeff Eckhardt, P.E. Tony Deatherage
Southern California Edison	Randy Stone
Southern Company - Alabama Power Company	Herman Scott Jenny Taylor
Sunbelt Rentals.....	Jeffrey Stachowiak
Sunstate Equipment Co.	Jake Kidd

Superior Scaffold Services Inc.....	Shawn MacDonald
Technology International Co.	Michael Zhou
Terex South Dakota, Inc.	Jim Olson
	Dan Brenden
Terex Utilities, Inc.....	Ted Barron
The Townsend Corporation.....	Mark Kimbrough
The VON Corporation	Fred von Herrmann
Time Manufacturing Company	James Christian
	Brian Davis
TNT Equipment Co.	Michael Solomon
TrainMOR / Morrison Industrial Equipment.....	Scott Ahner
Tutus LLC.....	Forrest Hester
	Kevin Jones
United Rentals.....	Teresa Kee
	Lee Braden
Utility Truck Equipment & Parts LLC.....	John Mlaker
Vollmer-Gray Engineering.....	Paul Guthorn
Waco Boom Company Ltd	Jonathan Woods
	Bob Simon
Wiss, Janney, Elstner Associates Inc.	Jason Kamman
Xtreme Manufacturing.....	Jake Adkins
	Jonathan Rasa
Zachry Group	Daniel Davis

Subcommittee A92.22 on Safe Use of Mobile Elevating Work Platforms (MEWPs), had the following members:

Tony Groat, Chairman	Kevin Gern	Frank Radio
Scott Ahner	Kevin Gildea, PE	Tony Radke
Donald E. Allison, Ph.D., P.E.	Paul Guthorn	Don Schaller
Geoffrey Arther	Bryan Hall	Tracy Kurt Schroeder
Robert Backer	Frederick Heath	Herman Scott
Thomas Baker	Bob Hendricks	Richard Smith
Donald Barrows	Forrest Hester	Rodney Kevin Smith, P.E.
Jason Berry	Richard Hoffelmeyer	Jeff Stachowiak
Brad Boehler	Brent Hoover	Robert Vetter
Brian Boggess	Christopher Hughes	Luke Webber
Frank Bonesteel	Kevin Jones	George Wharton
Lee Braden	Jason Kamman	David White
John Brewington	Teresa Kee	Robert Wuertz
Joshua Chard	Jake Kidd	Frankie Wynn
James Christian	Justin Laskowski	Michael Zhou
Brian Clark	John McClelland	
Daniel Davis	Ian McGregor	
Michael DeGiglio	Dave Merrifield	
Albert Eccles	Eric Moran	
Dennis Eckstine	Daniel J. Moss	
Matthew Eckstine	Bradley Nester	
Barris Evulich	Jim Olson	
Stephen Forgas	Tom Pokornik	

Contents Section.....	Page
1. Scope and Purpose	2
1.1 Scope.....	2
1.1.1 Equipment Covered	2
1.1.2 Effective Date.....	2
1.1.3 MEWP Classifications	2
1.1.4 Applicability	2
1.1.5 Compliance	3
1.2 Purpose	3
2. Referenced and Related American National Standards and Related Publications	3
2.1 Referenced American National Standards	3
2.2 Other Referenced Documents	3
3. Definitions	3
4. General Requirements	7
4.1 Basic Principles	7
4.2 Safe Use Planning	8
4.3 Manuals	8
4.4 Record Retention.....	9
4.5 Modifications.....	9
5 Maintenance, Inspection and Repair.....	9
5.1 Scheduled Maintenance	9
5.2 Pre-delivery Inspections	10
5.3 Frequent Inspection.....	10
5.4 Annual Inspection	11
5.5 Pre-start Inspection.....	11
5.6 Maintenance and Repair Training	11
5.7 Maintenance and Repair Safety Precautions	11
5.8 Replacement Parts	12
5.9 Safety-related Bulletins.....	12
6 Operation.....	12
6.1 Risk Assessment	12
6.1.1 General.....	12
6.1.2 Stages of Risk Assessment	12
6.1.2.1 Identify the Task to be Undertaken	12
6.1.2.2 Select an Appropriate MEWP	12
6.1.2.3 Assess the Risks Associated with the Task	13
6.1.2.4 Identify Control Measures.....	13
6.1.2.5 Identify Safe Work Procedures.....	13
6.1.2.6 Rescue from Height.....	13
6.1.2.7 Communicate the Results	14
6.2 MEWP Personnel Qualifications and Training Requirements	14
6.2.1 Operator Qualification and Training	14
6.2.2 Occupant Knowledge	15
6.2.3 Supervisor Training	15
6.2.4 Retraining.....	15
6.2.5 Familiarization	15
6.3 Assistance to Operators	15

6.4 Before Operation	16
6.5 Work Place Inspection	16
6.6 Prior to Each Operation	17
6.7 Understanding of Hazardous Atmosphere Locations	17
6.8 Specific Requirements of Operation	17
6.8.1 Fall Protection	17
6.8.2 Weather Considerations.....	17
6.8.2.1 Effect of Wind Forces on MEWPs	17
6.8.2.2 Effect of Wind on Equipment in the Work Platform	18
6.8.2.3 Local Wind Effects	18
6.8.2.4 Use in Thunderstorms	18
6.8.3 Ground Condition Considerations	18
6.8.3.1 General	18
6.8.3.2 Inadequate Outrigger Foundations	18
6.8.3.3 Sub-surface Voids	18
6.8.4 Public Roads	18
6.8.5 Slope and Grade	19
6.8.6 Deployment of Stability-enhancing Means.....	19
6.8.7 Guardrail System	19
6.8.8 Distribution of Load	19
6.8.9 Maintaining Overhead Clearance	19
6.8.10 MEWP Travelling	19
6.8.10.1 Before Moving the Work Platform or MEWP	19
6.8.10.2 Moving or Traveling	20
6.8.10.3 While Working at Height	20
6.8.11 Work Platform Materials.....	20
6.8.12 Electrical Hazards	20
6.8.13 Footing for Personnel.....	21
6.8.14 Precautions for Other Moving Equipment	21
6.8.15 Reporting Problem(s) or Malfunction(s)	21
6.8.16 Reporting Potentially Hazardous Locations and/or Hazardous Atmospheres.....	21
6.8.17 Hazardous Location Operation and/or Hazardous Atmospheres	21
6.8.18 Entanglement	21
6.8.19 Load Transfer.....	21
6.8.20 Work Area	22
6.8.21 Ventilation	22
6.8.22 Fuelling.....	22
6.8.23 Battery Charging	22
6.8.24 Improper MEWP Stabilization	22
6.8.25 Misuse as a Crane	22
6.8.26 Use of MEWP for Grounding	22
6.8.27 Climbing the Extending Structure	22
6.8.28 Unusual Operating Support Conditions	22
6.8.29 Stunt Driving.....	23
6.8.30 Unauthorized Use	23
6.8.31 Altering and Disabling	23
6.8.32 Snagged Platform	23
6.8.33 Exiting (or Entering) a MEWP at Height.....	23
6.8.34 Safe Carrying of Materials.....	24
6.8.35 Carrying Materials Outside the Work Platform.....	24
6.8.36 Allowable Rated Forces	24

6.8.37 Misuse as a Jack.....	24
6.8.38 Moving Overhead Obstructions	24
6.8.39 Parking of the MEWP	24
7 Transport	24
Appendixes (Informative)	Page
Appendix A	
MEWP Classifications	25

Introduction

This American National Standard is one of a series of standards produced by ANSI/SAIA A92 as part of its program of work regarding standardization of terminology, ratings, general principles (technical performance requirements and risk assessment), safety requirements, test methods, maintenance and operation for elevating work platforms used to raise (elevate) and position personnel (and related work tools and materials).

This Standard, ANSI/SAIA A92.22, along with companion Standards ANSI/SAIA A92.20 and ANSI/SAIA A92.24, have been developed to replace existing Standards ANSI/SAIA A92.3, ANSI/SAIA A92.5, ANSI/SAIA A92.6 and ANSI/SAIA A92.8. The reasoning that led to the development of these three new Standards was: to combine the requirements for MEWPs exhibiting similar configuration and application; to more closely harmonize with existing ISO Standards; and to more closely relate to a specific audience.

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

1. Scope and Purpose

1.1 Scope

1.1.1 Equipment Covered

This Standard specifies requirements for application, inspection, training, maintenance, repair and safe operation of Mobile Elevating Work Platforms (hereafter known as MEWPs).

It applies to all types and sizes of MEWPs as specified in ANSI/SAIA A92.20 (design, calculations, safety requirements and test methods) that are intended to position personnel along with their necessary tools and materials, at work locations

Any MEWP covered by this standard is prohibited from use when working on or near equipment or circuits which may be energized (see Section 6.8.12). The operation of any MEWP used for this work shall conform to the requirements of the ANSI/SAIA A92.2 Vehicle Mounted Elevating and Rotating Aerial Devices standard.

1.1.2 Effective Date

This standard will become effective June 1, 2020 for responsibilities for manufacturers, dealers, owners, users, supervisors, operators, occupants, lessors, lessees and brokers for both new and existing units delivered by sale, lease, rental or any form of beneficial use on or after that effective date.

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.

Training shall comply with ANSI/SAIA A92.24 Training Requirements for the Use, Operation, Inspection, Testing and Maintenance of Mobile Elevated Work Platforms (MEWPs) and shall identify both the group and type of the equipment for which training is provided.

NOTE See Appendix A for typical examples of equipment covered by each classification.

1.1.4 Applicability

This American National Standard is not applicable to:

- a) permanently installed personnel-lifting appliances serving defined levels,
- b) fire-fighting and fire rescue appliances,
- c) unguided work cages suspended from lifting appliances,
- d) elevating operator position on rail-dependent storage and retrieval equipment,
- e) tail lifts,
- f) mast-climbing work platforms (see ANSI/SAIA A92.9),
- g) fairground equipment,
- h) lifting tables with a lifting height of less than 2 m (6.56 ft.),
- i) builder's hoists for persons and materials,