

American National Standard for

DESIGN,
CALCULATIONS,
SAFETY REQUIREMENTS
and TEST METHODS
for MOBILE ELEVATING
WORK PLATFORMS
(MEWPs)



**SCAFFOLD & ACCESS
INDUSTRY ASSOCIATION**

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Erratum to A92.20-2018

Reference: Table 3— Performance Levels for Safety Devices

The A92.20 Subcommittee notes editorial errors in the 2018 edition of ANSI/SAIA A92.20, Standard Design, Calculations, Safety Requirements and Test Methods for Mobile Elevating Work Platforms (MEWPs). Paragraph of Standard References were replaced with the correct references, and duplicated descriptions or descriptions that did not reference back to the standard, were removed from the Descriptions Safety Function.

Updated December 19, 2018

**ANSI/SAIA
A92.20-2021**

**AMERICAN NATIONAL STANDARD
establishing
DESIGN, CALCULATIONS,
SAFETY REQUIREMENTS
and TEST METHODS
for MOBILE ELEVATING
WORK PLATFORMS (MEWPs)**

Secretariat
Scaffold & Access Industry Association, Inc.

Approved: August 5, 2021
American National Standards Institute, Inc.

American National Standard

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Foreword

This foreword is not part of American National Standard for A92.20-2021.

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).

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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:

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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 A92.20, along with companion Standards ANSI/SAIA A92.22 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.

The objective of this American National Standard is to define principles of design, safety requirements and methods for verifying these safety requirements for mobile elevating work platforms (MEWPs). A MEWP is the product of activities that include design, production and testing to provide information on the MEWP.

This American National Standard does not repeat all the general technical rules applicable to every electrical, mechanical or structural component. Its safety requirements have been drawn up on the basis that MEWPs are periodically maintained according to given instructions, working conditions, frequency of use and national or other regulations. It is assumed that MEWPs are checked for function before start of work, whether used daily or seldom used, and are not put into operation unless all the required control and safety devices are available and in working order. Where, for clarity, an example of a safety measure is given in the text, it is not intended as the only possible solution. Any other solution leading to the same risk reduction is permissible if an equivalent level of safety is achieved.

American National Standard Establishing Design, Calculations, Safety Requirements and Test Methods for Mobile Elevating Work Platforms (MEWPs)

1. Scope and Purpose

1.1 Scope

1.1.1 This American National Standard specifies safety requirements and preventive measures, and the means for their verification, for certain types and sizes of mobile elevating work platforms (MEWPs) Intended to position personnel, along with their necessary tools and materials, at work locations. It contains the structural design calculations and stability criteria, construction, safety examinations and tests that shall be applied before a MEWP is first put into service.

1.1.2 Effective Dates

This standard is effective August 15, 2021 as follows:

1.1.2.1 Design, Manufacture and Remanufacture Requirements

- The design and manufacturing requirements of this Standard shall apply to all MEWPs manufactured/remanufactured on or after the effective date; and
- MEWPs manufactured/ remanufactured on or after the effective date shall comply with the requirements of this Standard.

1.1.2.2 Rebuild/Reconditioned Requirements

Rebuilt/reconditioned MEWPs shall comply with the Standards in effect as of the date of their original manufacture.

1.2 Purpose

1.2.1 This Standard is intended to serve as a guide for manufacturers, remanufacturers, engineers and designers of MEWPs to achieve the following objectives:

- a) prevention of accidents and personal injuries;
- b) establishment of criteria for design, manufacture, remanufacture, rebuild/recondition, testing and performance; and
- c) establishment and understanding by manufacturers, remanufacturers, engineers, and designers of their responsibilities.

1.3 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;
- j) aircraft ground-support equipment (see ANSI/SAIA A92.7);
- k) digger derricks;
- l) industrial trucks with elevating operator positions;
- m) insulated aerial devices for use in live work on electrical installations; and
- n) vehicle-mounted elevating and rotating aerial devices (see ANSI/SAIA A92.2).

1.4 Exclusions

This Standard excludes requirements for hazards arising from:

- a) use in potentially explosive atmospheres;
- b) use of compressed gases for load-bearing components;
- c) work on live electric systems;
- d) getting on and off the work platform at different elevations;
- e) Derailment and runaway prevention of rail-mounted MEWPs.

1.5 Measurement

The values given in SI/metric are the standard. The values in parentheses are approximate and for information only.

2. Referenced and Related American National Standards and Related Publications

2.1 Referenced American National Standards

This Standard is intended to be used in conjunction with the following American National Standards. When these referenced Standards are superseded by a revision approved by the American National Standards Institute (ANSI), the revision shall apply:

ANSI/SAIA A92.22, Safe Use of Mobile Elevating Work Platforms (MEWPs)