

ASME A18.1-2023
(Revision of ASME A18.1-2020)

Safety Standard for Platform Lifts and Stairway Chairlifts

AN AMERICAN NATIONAL STANDARD



**The American Society of
Mechanical Engineers**

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FOREWORD

The consensus committee that approved the Standard was balanced to ensure that individuals from competent and concerned interests have had an opportunity to participate.

This Standard is intended to serve as the basis for state, municipal, and other jurisdictional authorities in drafting regulations governing the installation, testing, inspection, maintenance, alteration, and repair of platform lifts and stairway chairlifts. It is also intended as a standard reference of safety requirements for the guidance of architects, engineers, insurance companies, manufacturers, and contractors, and as a standard of safety practices for owners and managers of structures where equipment covered in the scope of this Standard is used.

This Standard is available for public review on a continuing basis. This provides an opportunity for additional public input from industry, academia, regulatory agencies, and the public-at-large.

Safety codes and standards are intended to enhance public health and safety. Revisions result from committee consideration of factors such as technological advances, new data, and changing environmental and industry needs. Revisions do not imply that previous editions were inadequate.

It should be pointed out that any governmental jurisdiction has authority over any particular installation. Inquiries dealing with problems of a local character should be directed to the proper authority in each jurisdiction. It is recommended that, prior to adoption, all pertinent state and local laws or ordinances be reviewed and where there is a conflict with any of the requirements of this Standard, an exception to such conflicting requirement be noted, quoting the section of the law that applies.

Equipment covered by this Standard was originally incorporated as a 1983 supplement to ANSI/ASME A17.1-1981, Safety Code for Elevators and Escalators. In ANSI/ASME A17.1b-1983, a new Part XXI covering private residence inclined stairway chairlifts and inclined and vertical wheelchair lifts was added. Part XX was added to cover these same devices installed in buildings other than private residences.

In 1996, as a result of the effort to harmonize the ASME A17.1 Code and the CAN/CSA-B44 Safety Code for Elevators, a new Main Committee on Platform Lifts and Stairway Chairlifts was established. The Committee developed the first edition, which incorporated Parts XX and XXI, as well as the applicable cross-references in ASME A17.1-1996, up to and including ASME A17.1a-1997.

The first edition of this Standard was approved by The American Society of Mechanical Engineers (ASME) Committee on Platform Lifts and Stairway Lifts, was approved and designated as an American National Standard by the American National Standards Institute (ANSI) on June 21, 1999, and issued on July 26, 1999. The ASME A18.1a-2001 Addenda was approved on January 30, 2001, and issued on March 26, 2001. The ASME A18.1b-2001 Addenda was approved on December 11, 2001, and issued on April 11, 2002.

The second edition of this Standard was approved by ANSI on July 29, 2003, and was issued on September 12, 2003.

The third edition of this Standard was approved by ANSI on May 6, 2005, and was issued on November 29, 2005.

The fourth edition of this Standard was approved by ANSI on July 3, 2008, and was issued on August 28, 2008.

The fifth edition of this Standard was approved by ANSI on August 31, 2011, and was issued on October 31, 2011.

The sixth edition of this Standard was approved by ANSI on July 10, 2014, and was issued on September 12, 2014.

The seventh edition of this Standard was approved by ANSI on August 3, 2017, and was issued on October 5, 2017.

The eighth edition of this Standard was approved by ANSI on June 18, 2020, and was issued on February 26, 2021.

The ninth edition of this Standard was approved by ANSI on October 18, 2023, and was issued on March 18, 2024.

ASME A18 COMMITTEE

Safety Standard for Platform Lifts and Stairway Chairlifts

(The following is the roster of the committee at the time of approval of this Standard.)

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Revisions and Errata. The committee processes revisions to this Standard on a continuous basis to incorporate changes that appear necessary or desirable as demonstrated by the experience gained from the application of the Standard. Approved revisions will be published in the next edition of the Standard.

In addition, the committee may post errata on the committee web page. Errata become effective on the date posted. Users can register on the committee web page to receive e-mail notifications of posted errata.

This Standard is always open for comment, and the committee welcomes proposals for revisions. Such proposals should be as specific as possible, citing the paragraph number, the proposed wording, and a detailed description of the reasons for the proposal, including any pertinent background information and supporting documentation.

Cases. The committee does not issue cases for this Standard.

Interpretations. Upon request, the committee will issue an interpretation of any requirement of this Standard. An interpretation can be issued only in response to a request submitted through the online Interpretation Submittal Form at <https://go.asme.org/InterpretationRequest>. Upon submitting the form, the inquirer will receive an automatic e-mail confirming receipt.

ASME does not act as a consultant for specific engineering problems or for the general application or understanding of the Standard requirements. If, based on the information submitted, it is the opinion of the committee that the inquirer should seek assistance, the request will be returned with the recommendation that such assistance be obtained. Inquirers can track the status of their requests at <https://go.asme.org/Interpretations>.

ASME procedures provide for reconsideration of any interpretation when or if additional information that might affect an interpretation is available. Further, persons aggrieved by an interpretation may appeal to the cognizant ASME committee or subcommittee. ASME does not "approve," "certify," "rate," or "endorse" any item, construction, proprietary device, or activity.

Interpretations are published in the ASME Interpretations Database at <https://go.asme.org/Interpretations> as they are issued.

Committee Meetings. The A18 Standards Committee regularly holds meetings that are open to the public. Persons wishing to attend any meeting should contact the secretary of the committee. Information on future committee meetings can be found on the committee web page at <https://go.asme.org/A18committee>.

ASME A18.1-2023

SUMMARY OF CHANGES

Following approval by the ASME A18 Standards Committee and ASME, and after public review, ASME A18.1-2023 was approved by the American National Standards Institute on October 18, 2023.

ASME A18.1-2023 includes the following changes identified by a margin note, **(23)**.

<i>Page</i>	<i>Location</i>	<i>Change</i>
1	1.1.3	Revised
5	1.5	First paragraph revised
6	Section 2	Revised in its entirety
8	Table 1.5-2	Editorially revised
24	Section 3	Revised in its entirety
33	Section 4	Revised in its entirety
38	Section 5	Revised in its entirety
47	Section 6	Revised in its entirety
54	Section 7	Revised in its entirety
59	Section 8	Revised in its entirety
62	Section 9	Revised in its entirety

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SAFETY STANDARD FOR PLATFORM LIFTS AND STAIRWAY CHAIRLIFTS

1 INTRODUCTION

1.1 Scope

1.1.1 Equipment Covered by This Standard. This safety Standard covers the design, construction, installation, operation, inspection, testing, maintenance, and repair of inclined stairway chairlifts and inclined and vertical platform lifts intended for transportation of a mobility-impaired person only. The device shall have a limited vertical travel, operating speed, and platform area. Operation shall be under continuous control of the user/attendant. The device shall not penetrate more than one floor. A full passenger enclosure on the platform shall be prohibited.

1.1.2 Equipment Not Covered by This Standard. Equipment not covered by this Standard includes, but is not limited to, the following:

- (a) elevators, escalators, moving walkways, material lifts, and dumbwaiters within the scope of ASME A17.1-1997 and later editions
- (b) personnel hoists within the scope of ANSI/ASSE A10.4
- (c) manlifts within the scope of ASME A9.1
- (d) powered platforms and equipment for exterior and interior building maintenance within the scope of ASME A120.1
- (e) portable equipment
- (f) amusement devices
- (g) stage and orchestra lifts

- (23) **1.1.3 Application.** This Standard applies to new installations only, except [sections 9](#) and [11](#), which apply to new and existing installations.

1.1.4 Effective Date. The requirements of this edition of the Standard are effective as of the date established by the local regulations of the authority having jurisdiction. Where the Standard has not been adopted by local regulations and a specific edition has not been stipulated by contractual agreement, compliance with this edition is recommended as of the effective date listed in the front of the document.

1.2 Purpose and Exceptions

The purpose of this Standard is to provide for the safety of life and limb, and to promote public welfare.

The provisions of this Standard are not intended to prevent the use of systems, methods, or devices of equivalent or superior quality, strength, fire resistance, effectiveness, durability, and safety to those prescribed by this Standard, provided that there is technical documentation to demonstrate the equivalency of the system, method, or device.

The specific requirements of this Standard shall be permitted to be modified by the authority having jurisdiction based on technical documentation or physical performance verification to allow alternative arrangements that will assure safety equivalent to that which would be provided by conformance to the corresponding requirements of this Standard.

1.3 Definitions

This section defines various terms used in this Standard.

alteration: any change to equipment other than maintenance, repair, or replacement.

approved: acceptable to the authority having jurisdiction.

authority having jurisdiction: organization, office, or individual responsible for approving equipment. Where compliance with this Standard has been mandated by law, the “authority having jurisdiction” is the federal, state, or local department or individual so designated in the enacting legislation or administrative regulation.

authorized personnel: persons who have been instructed in the operation of the equipment and designated by the owner to manage the use of the equipment.

building code: an ordinance that sets forth requirements for building design and construction, or where such an ordinance has not been enacted, the International Code Council (ICC), International Building Code (IBC), and International Residential Code (IRC) are the code standards.

cable, traveling: see *traveling cable*.

capacity: see *rated load*.

certified: a certification by a testing laboratory, a professional engineer, a manufacturer, or a contractor that a device or an assembly conforms to the requirements of this Standard.