ASME A18.1-2005
(Revision of ASME A18.1-2003)

Safety Standard for Platform Lifts and Stairway Chairlifts

AN AMERICAN NATIONAL STANDARD

The American Society of Mechanical Engineers

Errata
to
ASME A18.1-2005
Safety Standard for Platform Lifts and Stairway Chairlifts

On page 42 the first paragraph in para. 6.8, and on page 46 the first paragraph in para. 7.8 were incorrectly revised in the 2005 edition. They are being reinstated, by this errata, in their original form as they appeared in the 2003 edition. The correct paragraphs are presented below.

6.8 Safeties and Governors

All platforms shall be provided with a safety, except for platforms of direct-plunger hydraulic lifts or self-locking drives utilizing a lead screw or other positive gearing that will stop and hold the carriage with rated load within 100 mm (4 in.) of down travel after power is removed.

7.8 Safeties and Governors

All carriages shall be provided with a safety, except for platforms of direct-plunger hydraulic lifts or self-locking drives utilizing a lead screw or other positive gearing that will stop and hold the carriage with rated load within 100 mm (4 in.) of down travel after power is removed.

THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS
Three Park Avenue, New York, NY 10016-5990

April 2006

A0145E

ASME A18.1-2005
(Revision of ASME A18.1-2003)

Safety Standard for Platform Lifts and Stairway Chairlifts

AN AMERICAN NATIONAL STANDARD

The American Society of Mechanical Engineers

Three Park Avenue • New York, NY 10016

Date of Issuance: November 29, 2005

The next edition of this Standard is scheduled for publication in 2008. This Standard will become effective 6 months after the Date of Issuance. There will be no addenda issued to this edition.

ASME issues written replies to inquiries concerning interpretations of technical aspects of this Standard. Interpretations are published on the ASME Web site under the Committee Pages at http://www.asme.org/codes/ as they are issued.

The American Society of Mechanical Engineers
Three Park Avenue, New York, NY 10016-5990

CONTENTS

FOREWORD

This Standard is one of the numerous standards developed and published by The American Society of Mechanical Engineers (ASME) under procedures accredited as meeting the criteria for American National Standards. 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 management 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 of such 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 incorporates 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 ASME Committee on Platform Lifts and Stairway Lifts, was approved and designated as an ASME Standard by the American National Standards Institute (ANSI) on June 21, 1999, and was issued on July 26, 1999. The A18.1a-2001 addenda was approved on January 30, 2001 and issued on March 26, 2001. The A18.1b-2001 addenda was approved on December 11, 2001 and issued on April 11, 2002.

Second editon of this Standard was approved by ANSI on July 29, 2003, and was issued on September 12, 2003.

Following approval by the A18 Standards Committee and ASME, and after public review, ASME A18.1-2005 was approved by the American National Standards Institute on May 6, 2005.

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.)

OFFICERS

G. L. Harmon, *Chair*
D. W. Boydston, *Vice Chair*
E. Cho, *Secretary*

COMMITTEE PERSONNEL

D. C. Balmer, Concord Elevator, Inc.
R. Murphy, *Alternate,* Concord Elevator, Inc.
P. Barnhart, Underwriters Laboratories, Inc.
B. D. Black, Eastern Paralyzed Veterans Association
J. C. Bovis, Jon Bovis Consultants
D. W. Boydston, Handi-Lift, Inc.
J. Martin, *Alternate,* Accessibility Lifts, Inc.
P. Caploon, State of New Jersey
F. D. Carty, United Lift Service Co., Inc.
N. D. Chaitin, McKinley Equipment Corp.
W. M. McKinley, *Alternate,* McKinley Equipment Corp.
P. Chance, Inclinator Company of Central Pennsylvania
E. Cho, The American Society of Mechanical Engineers
P. Edwards, Integrity Group Co., Inc.
D. Hallman, DME Access, Inc.
G. L. Harmon, National Wheel-O-Vator
K. Brinkman PE, *Alternate,* National Wheel-O-Vator
G. E. Hedman PE, University of Illinois
M. K. Mazz, The Access Board
S. J. Windley, *Alternate,* The Access Board
M. L. McDonald, Access Disability Advisor, Inc.
J. L. Meyer, State of California
P. M. Puno, *Alternate,* State of California
B. Page, Bruno Independent Living Aids
T. A. Andrus, *Alternate,* Bruno Independent Living Aids
R. L. Phillips, Georgia Department of Labor
G. A. Rogers, Elevator Industry Work Preservation Fund
M. Townsend, Garaventa (Canada) Ltd.
R. B. Weber, Weber Accessibility System, Inc.
E. J. Zuercher, Ascension, A Division of AGM

CORRESPONDENCE WITH THE A18 COMMITTEE

General. ASME Standards are developed and maintained with the intent to represent the consensus of concerned interests. As such, users of this Standard may interact with the Committee by requesting interpretations, proposing revisions, and attending Committee meetings. Correspondence should be addressed to:

Secretary, A18 Standards Committee
The American Society of Mechanical Engineers
Three Park Avenue
New York, NY 10016-5990

Proposing Revisions. Revisions are made periodically to the Standard 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 periodically.

The Committee welcomes proposals for revisions to this Standard. Such proposals should be as specific as possible, citing the paragraph number(s), the proposed wording, and a detailed description of the reasons for the proposal, including any pertinent documentation.

Interpretations. Upon request, the A18 Standards Committee will render an interpretation of any requirement of the Standard. Interpretations can only be rendered in response to a written request sent to the Secretary of the A18 Standards Committee.

The request for interpretation should be clear and unambiguous. It is further recommended that the inquirer submit his/her request in the following format:

Subject:	Cite the applicable paragraph number(s) and the topic of the inquiry.
Edition:	Cite the applicable edition of the Standard for which the interpretation is being requested.
Question:	Phrase the question as a request for an interpretation of a specific requirement suitable for general understanding and use, not as a request for an approval of a proprietary design or situation. The inquirer may also include any plans or drawings which are necessary to explain the question; however, they should not contain proprietary names or information.

Requests that are not in this format will be rewritten in this format by the Committee prior to being answered, which may inadvertently change the intent of the original request.

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.

Attending Committee Meetings. The A18 Standards Committee regularly holds meetings, which are open to the public. Persons wishing to attend any meeting should contact the Secretary of the A18 Standards Committee.

ASME A18.1-2005
SUMMARY OF CHANGES

Following approval by the ASME A18 Committee and ASME, and after public review, ASME A18.1-2005 was approved by the American National Standards Institute on May 6, 2005.

The 2005 edition of ASME A18.1 includes revisions that are identified by a margin note, **(05)**. The following is a summary of the latest revisions and changes.

Page	*Location*	*Change*
3	1.3	Definition of *lever hydraulic driving machine* added
5	1.4	Added
	1.5	Para. 1.4 redesignated as 1.5
6	Table 1.4-1	Redesignated as 1.5-1
7	Table 1.4-2	Redesignated as 1.5-2
9	2.1.3.3	Revised
	2.1.3.4	Revised
10	2.1.3.6	Revised
13	2.5.1.1	Revised
14	2.5.2	Revised
15	2.7.1	Revised
16	2.8	Revised
17	2.8.8	Added
18, 19	2.12	Added
	2.13	Para. 2.12 redesignated as 2.13
	3.1.2.3	Revised
23	3.6.10	Added
26	3.12	Added
	3.13	Para. 3.12 redesignated as 3.13
31	5.1.1.2	Revised
	5.1.1.7	Revised
34, 35	5.5.1.1	Revised
	5.5.2	Revised
	5.7.1	Revised
36, 37	5.8	Revised
	5.8.8	Added
42	6.8	Revised
46	7.8	Revised
52	8.3.2	Revised
55	Fig. 9.7	Revised

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 A17.1b–1997 and later edition

(b) personnel hoists within the scope of ANSI A10.4

(c) manlifts within the scope of ASME A90.1

(d) powered platform and equipment for exterior and interior building maintenance within the scope of ANSI A120.1

(e) portable equipment

(f) amusement devices

(g) stage and orchestra lifts

1.1.3 Application. This Standard applies to new installations only.

1.1.4 Effective Date. The requirements of this edition to 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 regulation 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 the 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 upon 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 and/or maintenance of the equipment and designated by the owner to use or maintain the equipment.

building code: an ordinance that sets forth requirements for building design and construction, or where such an ordinance has not been enacted, one of the following model codes:

(a) National Building Code

(b) Standard Building Code

(c) Uniform Building Code

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.