ASME A17.1-2007/CSA B44-07
(Revision of ASME A17.1-2004 and CSA B44-04)

Safety Code for Elevators and Escalators

Includes Requirements for Elevators, Escalators, Dumbwaiters, Moving Walks, Material Lifts, and Dumbwaiters With Automatic Transfer Devices

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ASME issues written replies to inquiries concerning interpretations of technical aspects of this Code. The interpretations will be included with each edition and subsequent addenda. Interpretations are also published on the ASME Web site under the Committee Pages at http://cstools.asme.org as they are issued.

Inquiries should be addressed to the American Society of Mechanical Engineers or Canadian Standards Association.

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(07)

ASME FOREWORD

The first edition of this Code was published in January 1921. It was prepared by an American Society of Mechanical Engineers (ASME) Committee on Protection of Industrial Workers with the assistance of representatives of a number of interests including manufacturers, insurance carriers, regulatory bodies, and technical societies.

Subsequently, ASME requested the American Engineering Standards Committee (AESC) to authorize the organization of a Sectional Committee to undertake this revision. They acted favorably on this request, and in January 1922, assigned sponsorship for the project jointly to the American Institute of Architects, the National Bureau of Standards, and ASME, all three of whom had taken an active part in the preparation of the first edition of the Code.

The organization meeting of the Sectional Committee A17 was held in November 1922. A number of meetings of the Committee were held during the next two years and in July 1925, a revision of the 1921 Code was completed, approved by the AESC, and published as an American Standard.

Subsequent to the publication of the 1925 revision of the Code, the necessity for development research on the design and construction of car safeties and oil buffers and for the development of test specifications for various parts of elevator equipment was realized.

As a result, a Subcommittee on Research, Recommendations, and Interpretations was appointed in 1926. This subcommittee held regular meetings thereafter until interrupted by the war in 1940, and carried on an extensive test program at the National Bureau of Standards in connection with oil buffers and car safeties. Subsequent to the war, the name of this subcommittee was changed to "Executive Committee for the Elevator Safety Code."

The information gained as a result of these tests, together with the developments that had occurred in the design of the equipment as a result of installations made in very tall buildings, prompted the Sectional Committee to prepare and issue the third edition of the Code in 1931. The third edition was approved by the Sectional Committee in February 1931, and subsequently by the sponsors and by the American Standards Association (formerly the AESC) in July 1931.

Further experience and developments in the design of elevator equipment, led the Sectional Committee, in line with its policy of revising the Code periodically, to prepare the fourth edition in 1937, which was approved by the sponsors and by the American Standards Association (ASA) in July 1937.

A fifth edition of the Code was well under way in 1940 when it was necessary to suspend the work due to the Second World War. However, a number of the revisions already agreed upon by the Sectional Committee and approved by the sponsors and by the ASA in April 1942, were issued as a supplement to the 1937 edition. They were subsequently incorporated in a reprint of the 1937 edition in 1945. In response to public demand, requirements for private residence elevators were also issued in a separate supplement, ASA A17.1.5-1953, and incorporated into the Code as Part V in the 1955 edition.

The Sectional Committee reinitiated consideration of the fifth edition of the Code in 1946. Due to the considerable period which had elapsed since the fourth revision in 1937, and to the very extensive developments in the elevator art, the committee decided that the Code should be completely rewritten and brought up to date.

Special subcommittees were appointed to prepare the revisions of the various requirements. The membership of each subcommittee consisted of persons especially familiar with the requirements to be covered by that subcommittee. Fifteen subcommittees were set up with a total membership of over 150 persons. The membership of these subcommittees was not confined to members of the Sectional Committee. It also included other persons having expert knowledge of the subjects under consideration by the subcommittees. These subcommittees and their personnel were listed in the 1955 edition of the Code.

The drafts prepared by these subcommittees were widely circulated to interested groups for comment. After review of the comments and correlation of the drafts, the fifth edition of the Code was approved by the Sectional Committee, subsequently by the sponsors, and by the ASA in June 1955.

In December 1957, a Supplement to the Code listing a number of revisions was approved by the ASA and published by ASME.

A sixth edition was published in 1960 which incorporated the revisions contained in the 1957 Supplement as well as approximately 96 revisions which were approved by the Sectional Committee in March 1960.

In 1958 the scope of the A17 Code was enlarged to include moving walks. The membership of the Sectional Committee was expanded to include manufacturers whose primary interest in the Committee was the development of rules and regulations on moving walks. A

subcommittee prepared a Safety Code for Moving Walks which was approved by the Sectional Committee, the sponsors, and by the ASA on March 20, 1962. This Code was published as Part XIII of the A17.1 Code, and was designated ASA A17.1.13-1962.

During 1962 and 1963, 38 additional changes to Parts I through XII of A17.1 were approved by the Sectional Committee, the sponsors, and the ASA, and were published as the 1963 Supplement to the 1960 edition of the Code.

A seventh edition was published in 1965 which incorporated the rules of the Safety Code for Moving Walks, ASA A17.1.13-1962, as Part XIII, the revisions covered by the 1963 Supplement as well as approximately 90 other revisions approved by the Sectional Committee, the sponsors, and the ASA. The title of the Code was also changed to the American Standard Safety Code for Elevators, Dumbwaiters, Escalators, and Moving Walks.

On August 24, 1966, the American Standards Association was reconstituted as the United States of America Standards Institute. The designation of standards approved as American Standards was changed to USA Standards. There was no change in the index identification or the technical content of the standards. At the same time, the ASA Sectional Committee, A17 on A Safety Code for Elevators, was changed to the USA Standards Committee, A17 on A Safety Code for Elevators. Four supplements to this edition were published from 1967 through 1970.

The United States of America Standards Institute later changed its name to American National Standards Institute, Incorporated (ANSI) on October 6, 1969. At the time that the new name became effective, the designation USA Standard was changed to American National Standard and the name of committees changed from USA Standards Committees to American National Standards Committees. The alphabetical designation of standard documents was changed from USA to ANSI.

The eighth edition of the Code (1971) incorporated the revisions covered by the four supplements and an additional 94 revisions. Seven supplements were issued from 1972 through 1976. Part XIV covering Material Lifts and Dumbwaiters with Automatic Transfer Devices was added in supplement ANSI A17.1d-1975.

The ninth edition of the Code (1978) incorporated 75 revisions in addition to those covered by the previous supplements. Part XV covering Special Purpose Personnel Elevators was added and the Reference Codes, Standards, and Specifications were moved from the Preface to a new Part XVI. Two supplements to this edition were issued in 1979 and 1980.

The tenth edition of the Code (1981) incorporated the revisions covered by Supplements ANSI A17.1a-1979 and ANSI A17.1b-1980, as well as the following new material: Part XVII, Inclined Elevators; Appendix F, Seismic Regulations; and Appendix G, Recommended Practice for Accelerating Moving Walks. Rule 211.3 and Part V were also completely revised, with the Private Residence Inclined Lifts moved to Part XVIII. Numerous other revisions and additions were also included which were approved since the time of the 1980 supplement.

The tenth edition of the Code was approved by the A17 Standards Committee. Since that time, the committee was reorganized in accordance with the ANSI Accredited Organization Method under the sponsorship of ASME. With this reorganization, the National Bureau of Standards and the American Institute of Architects relinquished their roles as cosecretariats. The Standards, Conference, and Executive Committees were also restructured as the Main Committee and the National Interest Review Committee, with the Working Committees (subcommittees) continuing to operate as before.

This reorganization also prompted a change in the title of the Code to the ANSI/ASME A17.1 Safety Code for Elevators and Escalators. The title was also shortened for convenience, and it should not be construed that the Code no longer covers dumbwaiters, moving walks, or the other equipment included within the Scope of the Code.

Two supplements to the 1981 edition were issued: ANSI/ASME A17.1a-1982 and ANSI/ASME A17.1b-1983. The 1982 supplement included a new Part XIX covering Elevators Used for Construction. In the 1983 supplement, the requirements for Private Residence Inclined Lifts in Part XVIII were expanded and incorporated into a new Part XXI covering Private Residence Inclined Stairway Chairlifts and Inclined and Vertical Wheelchair Lifts. Part XX was added to cover these same devices installed in buildings other than private residences. Requirements for Screw Column Elevators were also added and designated as Part XVIII.

The eleventh edition of the Code (1984) incorporated the changes made in the 1982 and 1983 supplements, as well as additional revisions.

The eleventh edition was updated with five supplements which were issued approximately every 6 months in 1985 through the spring of 1987. Appendix I (since redesignated as Appendix E) was added in ANSI/ASME A17.1a-1985. Requirements for rack and pinion elevators were added in ANSI/ASME A17.1c-1986, designated as Part XVI. The previous Part XVI (Reference Codes, Standards, and Specifications) was moved to Section 4 of the Introduction. In ANSI/ASME A17.1d-1986, the requirements for sidewalk elevators in Part IV, and alterations in Part XII, were completely revised.

The twelfth edition of the Code incorporated the changes made in supplements A17.1a-1985 through A17.1e-1987, as well as additional revisions. Among these changes was a complete revision of the requirements for dumbwaiters in Part VII. The format of the Code was also changed editorially to incorporate Exceptions into the body of the Rules.

The thirteenth edition of the Code incorporated the changes made in A17.1a-1988 and A17.1b-1989 as well as additional revisions. Part XXII, Shipboard Elevators, was added in A17.1b-1989. Part XXIII, Rooftop Elevators, appeared for the first time in this edition.

The fourteenth edition of the Code incorporates the changes made in A17.1a-1991 and A17.1b-1992 as well as the revisions shown in the Summary of Changes. Safety requirements for seismic risk zone 3 and greater were moved from Appendix F into new Part XXIV, Elevator Safety Requirements for Seismic Risk Zone 2 or Greater. Requirements for seismic risk zone 2 were added to Part XXIV.

The fifteenth edition of the Code incorporates the changes made in A17.1a-1994 and A17.1b-1995 as well as the revisions shown in the Summary of Changes. Part XXV, Limited Use/Limited Application Elevators, was added in A17.1b-1995. The rules in Part III have been harmonized with the CAN/CSA B44, Elevator Safety Standard, Sections 4 and 11, and Appendix G4.

The sixteenth edition of the Code incorporates changes made in A17.1a-1997 through A17.1d-2000. Requirements for Mine Elevators have also been added in Section 5.9 of this edition. In addition, the entire Code was reformatted to incorporate a decimal numbering system. For this edition of the Code cross-reference tables have been provided in order to facilitate the correlation between requirements from the fifteenth edition of the Code to the renumbered requirements of the sixteenth edition and vice versa. It is also noted, that this edition of A17.1 was the result of a joint effort between the ASME A17 Elevator and Escalator Committee and the CSA B44 Technical Committee to harmonize requirements between the ASME A17.1, Safety Code for Elevators and Escalators, and the CSA B44, Safety Code for Elevators.

The seventeenth edition of the Code incorporates changes made in A17.1a-2002 and A17.1b-2003. Additionally, in Sections 8.10 and 8.11, cross-references have been updated to reflect ASME A17.2-2001, Guide for Inspection of Elevators, Escalators, and Moving Walks.

This eighteenth edition of the Code is a fully bi-national standard. All former deviations between the ASME A17.1 Code and the CSA B44 Code have been fully addressed within this one Code. Additionally, this edition incorporates revisions to address the advancement of technologies used in the design and construction of elevator equipment which has enabled the installation of the equipment in other than traditional locations such as machine rooms. New requirements have also been added to address programmable electronic systems in safety-related applications of elevators.

The following is a complete list of past editions and supplements to the Code that have been published and the dates when they received final approval. The dates of issuance are also included for the documents published since 1974, and the dates on which they became effective are included for those published since 1978.

Editions and Supplements		Approved	Issued	Effective
First Edition	1921	January 1921	...	...
Second Edition	A17–1925	April 1925	...	...
Third Edition	ASA A17–1931	July 1931	...	...
Fourth Edition	ASA A17.1–1937	July 1937	...	...
Supplements	ASA A17.3–1942	April 1942	...	...
	ASA A17.1.5–1953	June 9, 1953	...	...
Fifth Edition	ASA A17.1–1955	June 15, 1955	...	...
Supplements	ASA A17.1a–1957	December 10, 1957	...	...
Sixth Edition	ASA A17.1–1960	August 29, 1960	...	...
Supplements	ASA A17.1.13–1962	March 20, 1962	...	...
	ASA A17.1a–1963	August 16, 1963	...	...
Seventh Edition	ASA A17.1–1965	July 29, 1965	...	...
Supplements	USAS A17.1a–1967	July 7, 1967	...	...
	USAS A17.1b–1968	December 11, 1968	...	...
	USAS A17.1c–1969	May 6, 1969	...	...
	ANSI A17.1d–1970	March 2, 1970	...	...
Eighth Edition	ANSI A17.1–1971	July 27, 1971	...	...
Supplements	ANSI A17.1a–1972	February 16, 1972	...	...
	ANSI A17.1b–1973	October 11, 1973	...	...
	ANSI A17.1c–1974	April 26, 1974	September 15, 1974	...
	ANSI A17.1d–1975	February 26, 1975	October 31, 1975	...
	ANSI A17.1e–1975	March 26, 1975	October 31, 1975	...

Editions and Supplements		Approved	Issued	Effective	
	ANSI A17.1f–1975	April 2, 1975	October 31, 1975	…	**(ED)**
	ANSI A17.1g–1976	August 12, 1976	November 30, 1976	…	
Ninth Edition	ANSI A17.1–1978	May 4, 1978	June 15, 1978	September 15, 1978	
Supplements	ANSI A17.1a–1979	February 5, 1979	March 30, 1979	June 30, 1979	
	ANSI A17.1b–1980	March 20, 1980	May 15, 1980	August 15, 1980	
Tenth Edition	ANSI/ASME A17.1–1981	September 8, 1981	October 22, 1981	April 22, 1982	
Supplements	ANSI/ASME A17.1a–1982	October 5, 1982	November 30, 1982	May 30, 1983	
	ANSI/ASME A17.1b–1983	October 24, 1983	December 23, 1983	June 23, 1984	
Eleventh Edition	ANSI/ASME A17.1–1984	August 16, 1984	September 16, 1984	March 16, 1985	
Supplements	ANSI/ASME A17.1a–1985	February 27, 1985	April 15, 1985	October 15, 1985	
	ANSI/ASME A17.1b–1985	August 6, 1985	October 15, 1985	April 15, 1986	
	ANSI/ASME A17.1c–1986	March 5, 1986	April 30, 1986	October 31, 1986	
	ANSI/ASME A17.1d–1986	September 8, 1986	November 30, 1986	May 31, 1987	
	ANSI/ASME A17.1e–1987	February 18, 1987	April 30, 1987	October 30, 1987	
Twelfth Edition	ASME/ANSI A17.1–1987	October 20, 1987	January 15, 1988	July 16,1988	
Supplements	ASME/ANSI A17.1a–1988	October 6, 1988	November 15, 1988	May 16, 1989	
	ASME/ANSI A17.1b–1989	November 10, 1989	November 30, 1989	May 31, 1990	
Thirteenth Edition	ASME A17.1–1990	October 8, 1990	February 8, 1991	August 9, 1991	
Supplements	ASME A17.1a–1991	October 21, 1991	February 28, 1992	August 29, 1992	
	ASME A17.1b–1992	October 28, 1992	December 29, 1992	June 30, 1993	
Fourteenth Edition	ASME A17.1–1993	October 18, 1993	December 31, 1993	July 1, 1994	
Supplements	ASME A17.1a–1994	August 17, 1994	December 31, 1994	July 1, 1995	
	ASME A17.1b–1995	October 5, 1995	January 31, 1996	August 1, 1996	
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Supplements	ASME A17.1a–1997	January 8, 1998	February 27, 1998	August 28, 1998	
	ASME A17.1b–1998	November 13, 1998	February 19, 1999	August 20, 1999	
	ASME A17.1c–1999	May 13, 1999	June 30, 1999	December 31, 1999	
	ASME A17.1d–2000	October 12, 2000	November 30, 2000	January 31, 2001	
Sixteenth Edition	ASME A17.1–2000	October 16, 2000	March 23, 2001	March 23, 2002	
Supplements	ASME A17.1a–2002	February 26, 2002	April 4, 2002	October 4, 2002	
	ASME A17.1b–2003	April 10, 2003	May 30, 2003	November 30, 2003	
Seventeenth Edition	ASME A17.1–2004	January 14, 2004	April 30, 2004	October 31, 2004	
Supplements	ASME A17.1a–2005	March 18, 2005	April 29, 2005	October 29, 2005	
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Eighteenth Edition	ASME A17.1–2007/CSA B44-07	February 20, 2007	April 6, 2007	October 6, 2007	

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P. Barnhart, Underwriters Laboratories Inc., Research Triangle Park, North Carolina, USA
J. Blain, Schindler Elevator Corporation, Morristown, New Jersey, USA
A. Brown, KONE Inc., Toronto, Ontario, Canada
J. Busse, Fujitec America Incorporated, Lebanon, Ohio, USA
J. Caldwell, ThyssenKrupp Elevator, Middleton, Tennessee, USA
J. Della Porta, Otis Elevator Company, Farmington, Connecticut, USA
I. Jay, British Columbia Safety Authority (BCSA), New Westminster, British Columbia, Canada
R. MacKenzie, CSA International, Toronto, Ontario, Canada
P. McDermott, Technical Standards & Safety Authority, Toronto, Ontario, Canada
M. Mihai, Technical Standards & Safety Authority, Toronto, Ontario, Canada
A. Rehman, Schindler Elevator Corporation, Scarborough, Ontario, Canada
J. Rennekamp, Fujitec America Incorporated, Lebanon, Ohio, USA
V. Todt, Elevator Constructors, St. Louis, Missouri, USA
J. Weber, KONE Inc., Moline, Illinois, USA

TASK FORCE ON THE NATIONAL BUILDING CODE OF CANADA FOR THE CSA B44 TECHNICAL COMMITTEE ON THE ELEVATOR SAFETY CODE

A. Rehman, *Chair,* Schindler Elevator Corporation, Scarborough, Ontario, Canada
M. Brierley, Coldwater, Ontario, Canada
R. Cavan, Human Resources and Social Development Canada, Ottawa, Ontario, Canada
C. Frechette, National Research Council Canada, Ottawa, Ontario, Canada
R. Hadaller, Technical Standards & Safety Authority, Toronto, Ontario, Canada
I. Kennedy, Brighton, Ontario, Canada
D. McColl, Otis Canada, Inc., Mississauga, Ontario, Canada
S. Mercier, Régie du bâtiment du Québec, Montréal, Québec, Canada
C. Nicol, The Toronto Advocacy Committee of the CNIB, Toronto, Ontario, Canada
S. Reynolds, The Peelle Company Limited, Brampton, Ontario, Canada
E. Sopeju, Underwriters' Laboratories of Canada, Scarborough, Ontario, Canada
C. Taraschuk, National Research Council Canada, Ottawa, Ontario, Canada
T. Tulshi, Canadian Standards Association, Mississauga, Ontario, Canada

ASME PREFACE

GENERAL

This Code is one of the numerous codes and standards developed and published by The American Society of Mechanical Engineers (ASME) under the general auspices of the American National Standards Institute, Inc. (ANSI).

The Code is intended to serve as the basis for the design construction, installation, operation, testing, inspection, maintenance, alteration, and repair of elevators, dumbwaiters, escalators, moving walks, and material lifts.

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.

This Code applies to new installations only, except Part 1, and 5.10, 8.1, 8.6, 8.7, 8.8, 8.9, 8.10, and 8.11, which apply to both new and existing installations. Also, see ASME A17.3, Safety Code for Existing Elevators and Escalators, for further requirements.

The following conditions are not addressed in this Code:

(a) assignment of the responsibility for compliance to any particular party.

(b) establishment of a frequency for periodic inspections and tests. See Nonmandatory Appendix N for recommended inspections and test intervals.

(c) assignment of responsibility for persons authorized to make and witness inspections and tests.

APPLICATION OF REQUIREMENTS TO NEW TECHNOLOGY

With the advent of new technologies, materials, and processes in the mechanical, structural, electronic, and optic fields, and the analytical capabilities now available, the need for flexibility to introduce products into the marketplace using these technical developments is desirable. Previous editions of ASME A 17.1 had longstanding provisions, in Section 1.2, that suggested that Authorities Having Jurisdiction should recognize safety equivalent to that required by the Codes. This edition of ASME A17.1/CSA B44 recognizes ASME A17.7/CSA B44.7 provides a structured method for establishing the safety of designs and products and that compliance with ASME A17.7/CSA B44.7 is equivalent to compliance with the requirements in ASME A17.1/CSA B44.

FORM AND ARRANGEMENT

This Code consists of parts and sections, each covering a specific subject so as to facilitate reference to the requirements.

The Foreword, Preface, Notes, and Appendices that are included in this document, and the Interpretations that are provided as a separate booklet are not part of this American National Standard. They are advisory in nature and are intended for clarification only.

In this edition, the revisions that are appearing for the first time are identified by (07). Where editorial changes have been made, they are identified by (ED). See also Summary of Changes.

METRIC (SI) UNITS

This edition of the Code uses hard metric (SI) units wherever practical. The acceptable equivalent imperial units are shown in parentheses. Information on the usage of SI units and conversion to imperial units is contained in IEEE/ASTM SI 10-1997 Standard for the Use of the International System of Units (SI): The Modern Metric System, ASME Guide SI-1, Orientation and Guide for Use of SI (Metric) Units, or CAN/CSA-Z234.1, Canadian Metric Practice Guide.

Tables related to speed and load use the hard metric and hard imperial units in common practice, even though they are not exactly equivalent (e.g., see Table 2.22.4.1, Minimum Buffer Strokes). The tabular values have been derived using 8.2.1 formulas and the metric and imperial values for buffer strokes, safety stopping distances, etc., are therefore not equivalent.

ASME ELEVATOR PUBLICATIONS

The following ASME publications are of special interest to users of this Code. For prices and availability, contact:

ASME Order Department
22 Law Drive
Box 2300
Fairfield, NJ 07007-2300
Tel: 800-843-2763
Fax: 973-882-1717
E-Mail: infocentral@asme.org
ASME Website: www.asme.org/catalog

ASME A17.2, Guide for Inspection of Elevators, Escalators, and Moving Walks. This Guide gives detailed procedures for the inspection and testing of elevators, escalators, and moving walks required to conform to the Safety Code for Elevators and Escalators, A17.1–1955 and later editions and the Safety Code for Existing Elevators and Escalators, A17.3. Subsections are arranged to focus on routine and periodic inspection requirements, as well as acceptance criteria.

ASME A17.3 Safety Code for Existing Elevators and Escalators. This Code covers retroactive requirements for existing elevators and escalators. The purpose of this Code is to establish minimum requirements that will provide a reasonable degree of safety for the general public. While many of these requirements will also increase the degree of safety for the elevator mechanic and inspector, this area has not been specifically addressed at this time.

ASME A17 CD-ROM for Elevators and Escalators. This CD-ROM contains the ASME A17.1, A17.2, and A17.3 standards. In addition, it contains the published interpretations applicable to these standards.

ASME A17.4 Guide for Emergency Personnel. This guide for emergency personnel (fire, police, etc.), building owners, lessees, and building operating managers explains the proper procedures to be used for the safe removal of passengers from stalled cars.

CSA B44.1/ASME A17.5 Elevator and Escalator Electrical Equipment. This Code contains requirements for obtaining, labeling, and listing electrical equipment for elevators, escalators, moving walks, dumbwaiters, material lifts, platform lifts, and stairway lifts.

ASME A17.7/CSA B44.7 Performance-Based Safety Code for Elevators and Escalators. This American National Standard performance-based safety code covers the design, construction, installation, operation, testing, maintenance, alteration, and repair of elevators, dumbwaiters, escalators, moving walks, and material lifts.

Published Interpretations. Interpretations of the various A17 standards are published periodically.

Interpretations of A17.1 and A17.2 approved by the A17 Committee from June 14, 1972 through June 1979, were published in a separate book in 1980.

Starting with the 1981 edition of the Code, interpretations are published with each new edition and supplement of the applicable standard. A compilation of Interpretations Nos. 2-13 (June 1979–May 1989) has also been published by ASME. A compilation of all interpretations can also be obtained through the A17 CD-ROM.

Handbook on A17.1/B44 Safety Code. This handbook augments the A17.1/B44 Code with commentary, diagrams, and illustrations that are intended to explain the requirements of the A17.1/B44 Code.

The commentary contained in the Handbook is the opinion of the author and has not been approved by the A17 Committee or the B44 Technical Committee.

QEI-1 Standard for the Qualification of Elevator Inspectors. This Standard covers requirements for the qualification and duties of inspectors and inspection supervisors engaged in the inspection and testing of equipment within the scope of the A17.1/B44 Code. It also includes requirements for the accreditation of organizations that certify inspectors and inspection supervisors as meeting the QEI criteria.

ASME A18.1 Safety Standard for Platform Lifts and Stairway Chairlifts. 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.

CORRESPONDENCE WITH A17 COMMITTEE

ASME codes and standards are developed and maintained with the intent to represent the consensus of concerned interests. As such, users of this and other ASME A17 codes and standards may interact with the committee by requesting interpretations, proposing revisions, and attending committee meetings. Correspondence should be addressed to:

Secretary, A17 Standards Committee
The American Society of Mechanical Engineers
Three Park Avenue
New York, NY 10016
E-mail: infocentral@asme.org

All correspondence to the Committee must include the individual's name and post office address in case the Committee needs to request further information.

Proposing Revisions. Revisions are made periodically to the Code to incorporate changes that appear necessary or desirable, as demonstrated by the experience gained from the application of the procedures, and in order to conform to developments in the elevator art. Approved revisions will be published periodically.

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

Requesting Interpretations. On request, the A17 Committee will render an interpretation of any requirement of the Code. Interpretations can only be rendered in response to a written request sent to the Secretary of the Standards Committee.

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

Abbreviations Used in This Code

Abbreviation	Unit	Abbreviation	Unit
A	Ampere	lb	pound (mass)
°C	degree Celsius	lbf	pound (force)
deg	degree (angle)	lx	lux
°F	degree Fahrenheit	m	meter
ft/min	foot per minute	m^2	square meter
ft/s	foot per second	m^3	cubic meter
ft	foot	mA	milliampere
fc	footcandle	m/s	meter per second
ft^2	square foot	m/s^2	meter per second per second
ft^3	cubic foot	mm	millimeter
ft/s^2	foot per second per second	mm^2	square millimeter
h	hour	mm^3	cubic millimeter
Hz	hertz	MPa	megapascal
in.	inch	N	Newton
$in.^2$	square inch	psi	pound per square inch
$in.^3$	cubic inch	s	second
kg	kilogram	SIL	Safety Integrity Level
kPa	kilopascal	V	volt

Subject: Cite the applicable Section number(s) and a concise description.

Edition: Cite the applicable edition and supplement of the Code 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 question shall be phrased, where possible, to permit a specific "yes" or "no" answer. The inquirer may also include any plans or drawings that 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 A17 Standards Committee and the various Working Committees regularly hold meetings all of which are open to the public. Persons wishing to attend any meeting should contact the Secretary of the Standards Committee.

CSA PREFACE

This is the first edition of ASME A17.1/CSA B44, *Safety Code for Elevators and Escalators*. It replaces the previous editions of CSA B44, published in 2004, 2000, 1994, 1990, 1985, 1975, 1971, 1966, 1960, and 1938.

This Code is the result of a joint effort by the CSA B44 Technical Committee on the Elevator Safety Code and the ASME A17 Committee on Elevators and Escalators to harmonize the provisions of CSA B44 and ASME A17.1. This edition of ASME A17.1/CSA B44 consists of the complete ASME A17.1 Code, with additional requirements applicable only in Canadian jurisdictions. These Canadian requirements are prefaced in the body of the Code by the following: "In jurisdictions enforcing the NBCC. . ."

CSA B44 was originally developed to facilitate the implementation of uniform legislation across Canada and to replace the existing legislation, which had proved inadequate for prevailing elevator practices. The primary purpose of the Code is to establish minimum requirements, suitable for adoption by regulatory authorities throughout Canada, for the design, installation, and maintenance of elevators, escalators, dumbwaiters, moving walks, and material lifts. It is also intended as a standard reference for architects, consulting engineers, elevator manufacturers, and building owners.

This Code is considered suitable for use for conformity assessment within the stated scope of the Code.

This Code was prepared for use in Canada by the CSA Technical Committee on the Elevator Safety Code under the jurisdiction of the CSA Strategic Steering Committee on Mechanical Industrial Equipment Safety. It has been formally approved by the CSA Technical Committee.

February 2007

NOTES:

(1) Use of the singular does not exclude the plural (and vice versa) when the sense allows.

(2) Although the intended primary application of this Code is stated in its Scope, it is important to note that it remains the responsibility of the users of the Code to judge its suitability for their particular purpose.

(3) This publication was developed by consensus, which is defined by *CSA Policy governing standardization — Code of good practice for standardization* as "substantial agreement. Consensus implies much more than a simple majority, but not necessarily unanimity." It is consistent with this definition that a member may be included in the Technical Committee list and yet not be in full agreement with all clauses of this publication.

(4) CSA Codes and Standards are subject to periodic review, and suggestions for their improvement will be referred to the appropriate committee.

(5) All enquiries regarding this Code, including requests for interpretation, should be addressed to Canadian Standards Association, 5060 Spectrum Way, Suite 100, Mississauga, Ontario, Canada L4W 5N6. Requests for interpretation should

(a) define the problem, making reference to the specific clause, and, where appropriate, include an illustrative sketch

(b) provide an explanation of circumstances surrounding the actual field condition

(c) be phrased where possible to permit a specific "yes" or "no" answer.

Committee interpretations are processed in accordance with the CSA Directives and guidelines governing standardization and are published in CSA's periodical *Info Update*, which is available on the CSA Web site at www.csa.ca.

ASME A17.1-2007/CSA B44-07
SUMMARY OF CHANGES

Following approval by the ASME A17 Elevator and Escalator Committee, and after public review, ASME A17.1-2007/CSA B44-07 was approved by the American National Standards Institute on February 20, 2007. It was issued on April 6, 2007, and is effective as of October 6, 2007.

ASME A17.1-2007/CSA B44-07 incorporates the revisions and editorial changes made in ASME A17.1a–2005 and ASME A17.1S–2005, as well as additional revisions and editorial changes. Revisions are identified by a margin note, **(07)**. Changes made to correct errors, as well as other new editorial changes, are identified by **(ED)**. Revisions introduced in ASME A17.1S–2005 are indicated by **(05S)**. Revision designators will remain on the pages up to the publication of the next edition of the Code. The **(ED)** designators will appear only when the editorial changes are introduced. The following is a summary of the latest revisions and changes:

Page	*Location*	*Change*
viii–xii	ASME Foreword	Revised
xix–xxi	ASME Preface	Revised
xxii	CSA Preface	Added
1	1.1.1	Revised
	1.1.2	(1) Subparagraph (d) revised (2) Subparagraphs (v) and (w) editorially revised (3) New subparagraph (x) added
2–16	Section 1.2	Revised in its entirety
	Section 1.3	(1) Definition of *alteration, as part of an*; *electrical/electronic/programmable electronic system (E/E/PES)*; *electrical/electronic/programmable electronic (E/E/PE)*; *escalator, skirt, dynamic*; *fire barrier*; *fire-protection rating*; *machine, driving: chain-hydraulic drive machine*; *manually (manual) reset, elevator*; *mode of operation*; and *safety integrity level (SIL)* added (2) Definition of *elevator observation*; *entrance, elevator, dumbwaiter, or material lift*; *entrance hardware, assembly*; *fire-resistance rating*; *fire-resistive construction*; and *leveling device, elevator, dumbwaiter, or material lift* revised (3) Definition of *clearance, top car, electronic elevators* and *control system* editorially revised (4) Definition of *fire endurance* and *travel* deleted
17	2.1.1.1.2	First paragraph revised

Page	*Location*	*Change*
18	2.1.2.3(c)	Editorially revised
19, 20	2.1.6.2	Revised in its entirety
	2.2.2.5	Revised
	2.2.4	Revised in its entirety
21	2.2.8	Second sentence added
	2.3.3.1	Revised
23	2.4.6.2(d)(1)	Editorially revised
	2.4.6.2(e)	Editorially revised
25	2.7.1.1.2	Editorially revised
26	2.7.1.3.1	Revised and Note added
28	2.7.5.1.2(e)	Second sentence editorially revised
29	2.7.5.2.1	Revised in its entirety
	2.7.5.3	Editorially revised
31	2.7.6.3.4(a)	Editorially revised
32	2.7.8.1	Revised
33	2.8.2.2	Revised
34	2.8.3.3.2	Paragraph revised
	2.8.3.3.4	Revised in its entirety
37	2.11.1.3	Editorially revised
	2.11.1.4	Last sentence revised
43	2.11.14.1(a)	Editorially revised
44	2.11.15.1	Title and paragraph revised
	2.11.15.1.1(d)	Added
	2.11.15.1.2	Revised in its entirety
	2.11.15.1.3	Added
	2.11.15.1.4	Added
	2.11.15.2	Title and first paragraph revised
45	2.11.19	Revised
	2.11.19.2	Editorially revised
	2.12.2.4.1	Editorially revised
46	2.12.2.4.6	Deleted and replaced by previously designated 2.12.2.4.7
	2.12.3.1(a)	Editorially revised
	2.12.3.1(b)	Editorially revised
47	2.12.3.4.5	Deleted and replaced by previously designated 2.12.3.4.6
48	2.12.6.2.4	Revised
	2.12.7.3.2	Revised

Page	*Location*	*Change*
54	2.14.2.1.1	Editorially revised
	2.14.2.1.2	Revised
	2.14.2.1.3	Editorially revised
59	2.14.7.1.3(a)	Revised
	2.14.7.1.4	Revised
71	2.18.4.2	Editorially revised
74	2.19.1.2(a)(1)(b)	Revised
	2.19.2.2(a)(1)(b)	Revised
82, 83	2.21.4	Third paragraph revised
	2.21.4.1	Revised
	2.21.4.2	Revised in its entirety
85	2.22.4.10.3	Editorially revised
88	Fig. 2.23.4.1-1	For 10 000 kg, parenthetical conversion value editorially corrected
89–92	Fig. 2.23.4.1-2	For 10 000 kg, parenthetical conversion value editorially corrected
99	2.26.1.4.1(d)(1)	Revised
103	2.26.2.38	Added
	2.26.4.2	Revised
	2.26.4.3	Revised in its entirety
	2.26.5	Subparagraphs (a) and (b) revised
104, 105	Table 2.26.4.3.2	Added
106, 107	2.26.8.2	Revised in its entirety
	2.26.9.3	First paragraph revised
	2.26.9.3(c)	Editorially revised
	2.26.9.4	Revised in its entirety
	2.26.9.5	Editorially revised
	2.26.9.5.1	Revised in its entirety
	2.26.9.5.2	Revised
	2.26.9.5.3	Revised
	2.26.9.5.4	Revised
	2.26.9.6	Editorially revised
	2.26.9.6.1	Revised in its entirety
109	Section 2.27	Note revised
	2.27.1.1.1	Revised
	2.27.1.1.2	Revised
	2.27.1.1.4	Revised
110	2.27.1.2(d)	Editorially revised

Page	*Location*	*Change*
	2.27.3	Revised in its entirety
	2.27.3.1.1	First paragraph revised
	2.27.3.1.2	Revised
111	2.27.3.1.6(i)	Second sentence corrected by errata
	2.27.3.1.6(l)	Revised in its entirety
112	Fig. 2.27.3.1.6(h)	Revised
	2.27.3.1.6(n)	Added
	2.27.3.2.2	Revised in its entirety
	2.27.3.2.3(b)	Revised
	2.27.3.2.3(c)	Revised
	2.27.3.2.3(d)	Editorially revised
	2.27.3.2.4(b)	Editorially revised
113, 114	2.27.3.3	Revised in its entirety
	2.27.3.3.1(c)	Revised
	2.27.3.3.1(h)	Last sentence added
	2.27.3.3.1(i)	Revised
	2.27.3.3.1(k)	Revised
	2.27.3.3.1(m)	Revised and Note added
	2.27.3.3.1(n)	Added
	2.27.3.3.2	Revised
	2.27.3.3.4	Revised
115, 116	2.27.3.4	Revised in its entirety
	2.27.3.5	Revised in its entirety
	2.27.4(a)	Editorially revised
	2.27.4.2	Last sentence of fourth paragraph corrected by errata
	2.27.5.2(a)	Revised
117	2.27.8	Revised in its entirety
119	Fig. 2.27.9	Revised
122	Section 3.7	Subparagraphs 3.7.1.1 through 3.7.1.9 corrected by errata
123	Section 3.14	Revised
124	Section 3.17	Title revised
125	3.17.1.3	Editorially revised
	3.17.3.2.2(b)	Revised
	3.17.3.6.2	Revised
126	3.17.4	Added
128	3.18.6	Added

Page	*Location*	*Change*
129	3.19.3.1	Revised
133	3.25.2.2	Title and paragraph revised
	3.25.2.2.1	Revised
	3.25.2.3	Added
	3.25.2.4	Added
	3.25.2.4.1	Added
135	3.26.6.2	Revised in its entirety
	3.26.6.3	Added
	3.26.6.4	Added
136	3.27.1	Last sentence added
	3.27.2	Second paragraph revised
138	4.1.2.2	Revised in its entirety
139	4.1.9.1	Revised in its entirety
144	4.3.4	Second paragraph editorially revised
146	4.3.15	First and third paragraphs editorially revised
147	Part 5	In Scope, subparagraphs (g) and (i) revised
148	5.1.8.1	Revised
153, 154	5.2.1.1.2	Revised in its entirety
	5.2.1.4.2	Revised in its entirety
	5.2.1.7	Title and paragraph revised in its entirety
	5.2.1.8	Title and paragraph revised
	5.2.1.12	First paragraph revised
155	5.2.1.13	Title and paragraph revised in its entirety
157, 158	5.2.1.27	Revised
	5.2.2	Revised in its entirety
	5.3.1.1	Revised
	5.3.1.1.1	Revised in its entirety
	5.3.1.1.2	Revised in its entirety
159	5.3.1.7.1	Revised
	5.3.1.7.8	Added
	5.3.1.7.9	Added
160	5.3.1.8.1(d)	Revised in its entirety
	5.3.1.8.2(a)	Revised
162	5.3.1.16.2(a)	Subsubparagraphs (7) and (8) added
163	5.3.1.16.2(j)	Added
	5.3.1.16.5	Added

Page	*Location*	*Change*
164	5.3.1.18.2	(1) Subparagraph (c) revised (2) New subparagraph (d) added, and previous (d) redesignated as (e)
	5.3.1.18.4(b)	Revised
165	5.3.2.2.1	Revised
	5.3.2.3	Revised
169	5.4.15.5.2	Revised
173	5.5.1.26	Editorially revised
174	5.6.1.4(d)	Editorially revised
176	5.6.1.25.3	First paragraph editorially revised
177	Section 5.7	First paragraph revised
182	5.8.1.1	First sentence revised
	5.8.1.2	First sentence revised
183	Section 5.9	First paragraph revised
185	5.9.14.1(a)	Second sentence revised
	5.9.14.1(b)	Revised
	5.9.14.1(c)	Revised
186	5.9.17.6	Editorially revised
192	6.1.3.3.1(a)(1)	Revised
	6.1.3.3.1(a)(2)	Revised
194	6.1.3.3.9(c)(2)	Editorially revised
195, 196	6.1.3.5.6	Both paragraphs revised
198	6.1.6	Requirement 6.1.6.7 deleted
199	6.1.6.3	Editorially revised
	6.1.6.3.1(a)	Revised
203, 204	6.1.6.11(b)	Revised
	6.1.7.3.2	Revised
	6.1.7.4.2	Revised
	6.1.8.1	Revised in its entirety
	6.1.8.2	Revised in its entirety
210	6.2.6.3.1(a)	Revised
213	6.2.6.10(b)	Revised
	6.2.7.3.2	Revised
214	6.2.7.4.2	Revised
	6.2.8.1	Revised in its entirety
	6.2.8.2	Revised in its entirety
215, 216	Part 7	In Scope, second paragraph added
	Section 7.1	Second paragraph deleted

Page	*Location*	*Change*
	7.1.1.2	Revised
	7.1.4.3	Added
218	7.1.12.1.1	Subparagraphs (b) and (c) editorially revised
219	7.1.12.4	Revised in its entirety
	Section 7.2	Second sentence deleted
221	7.2.2.8	Revised in its entirety
	7.2.3.3.1	Revised
224	7.2.12.4	Revised
	7.2.12.4.3	Added
	7.2.12.10	Revised in its entirety
225	Section 7.3	Second sentence deleted
226	7.3.11.5.2	Revised
227	7.4.2	Revised in its entirety
	7.4.5	Revised in its entirety
228	Table 7.4.3	Under Clearances, last entry revised
229	7.4.9	Revised
	7.4.11	Revised
	7.4.12	Revised
232	7.5.3.4	Revised in its entirety
237	7.9.1.1	Revised
240, 241	8.1.1	Revised in its entirety
	8.1.2	Revised in its entirety
	8.1.3	Revised in its entirety
	8.1.4	(1) First paragraph revised (2) Note (d) added
259	Section 8.3	Subparagraph (a)(4) editorially revised
265	8.3.7.3	Editorially revised
270	Fig. 8.4.8.2-1	Revised
271	Fig. 8.4.8.2-2	Revised
272	Fig. 8.4.8.2-3	Revised
273	Fig. 8.4.8.2-4	Revised
274	Fig. 8.4.8.2-5	Revised
275	Fig. 8.4.8.2-6	Revised
276	Fig. 8.4.8.2-7	Revised
282	8.4.11.2	Revised in its entirety
287	8.4.13.2	Revised in its entirety
288, 289	Section 8.6	Revised

Page	*Location*	*Change*
	8.6.1.2.1(a)(1)(f)	Added
	8.6.1.2.1(e)	Added
	8.6.1.2.1(f)	Added
	8.6.1.4.1(d)	Editorially revised
290	8.6.1.6.3(d)	Revised and Note added
292	8.6.3.7.2	Second paragraph revised
	8.6.4.1.3	Revised
294	8.6.4.18	Added
299	8.6.12	Added
302, 303	8.7.1.7	Second sentence added
	8.7.1.8	Second sentence added
	8.7.2.1.3	Editorially revised
	8.7.2.1.4	Editorially revised
	8.7.2.7.6	Editorially revised
	8.7.2.7.7	Editorially revised
306	8.7.2.15.2	Revised in its entirety
	8.7.2.17	Title editorially revised
	8.7.2.17.1	Title and paragraphs editorially revised
307	8.7.2.17.2(b)(5)	Editorially revised
308	8.7.2.23	Revised in its entirety
	8.7.2.25.1(a)	Editorially revised
	8.7.2.25.2(a)	Editorially revised
	8.7.2.25.2(b)	Editorially revised
309	8.7.2.27.6	First paragraph revised
	8.7.2.27.8	Added
310	8.7.3.15.3	Editorially revised
311	8.7.3.19	Editorially revised
	8.7.3.22	Title editorially revised
	8.7.3.22.1	First paragraph and subparagraphs (b), (c), and (e) editorially revised
	8.7.3.23.1	Revised
312	8.7.3.23.2	Revised
	8.7.3.23.3	Revised
313	8.7.3.31.11	Added
	8.7.4.3.7	Title and paragraphs editorially revised
314	8.7.6.1.1	Revised in its entirety
315	8.7.6.1.5	Revised in its entirety

Page	*Location*	*Change*
	8.7.6.1.9	Third paragraph deleted
	8.7.6.2.1	Revised
317	8.9.2	Revised
	8.10.1.4	Added
318–323	8.10.2.2.1(j)(1)	Revised
	8.10.2.2.1(j)(2)	Revised
	8.10.2.2.2	Revised in its entirety
	8.10.2.2.3	Subparagraphs (v), (w)(3), and (bb)(3) revised (2) Subparagraphs (ee) through (ii) added
	8.10.2.2.4	Subparagraphs (l) through (o) added
	8.10.2.2.5	(1) Subparagraphs (f) and (h)(3) revised (2) Subparagraphs (k) through (p) added
	8.10.2.2.7	Added
	8.10.2.2.8	Added
	8.10.2.3.2(n)	Editorially revised
324–330	8.10.3.2.1	Subparagraphs (v) through (x) added
	8.10.3.2.2	Revised in its entirety
	8.10.3.2.3	Revised in its entirety
	8.10.3.2.4	Revised in its entirety
	8.10.3.2.5	Revised in its entirety
	8.10.3.2.7	Added
	8.10.3.3.2	Subparagraphs (p) and (q) revised
	8.10.4.1.1	(1) Subparagraph (c)(1)(7) added (2) Subparagraph (i) revised (3) Subparagraph (j)(5) deleted (4) Subparagraph (s)(2) revised (5) Subparagraph (t)(6) revised
	8.10.4.1.2	Subparagraphs (d)(3)(b), (d)(6), and (v) added
331	8.10.5.2	Title and first paragraph revised
333–335	8.11.1.6	Title and paragraph revised
	8.11.1.7	Added
	8.11.2.1.1	Subparagraphs (v) through (x) added
	8.11.2.1.2	Revised in its entirety
	8.11.2.1.3	Subparagraphs (ee) through (ii) added
	8.11.2.1.4	Subparagraphs (m) through (o) added
	8.11.2.1.5	Subparagraphs (k) through (p) added
	8.11.2.1.7	Added
336, 337	8.11.2.2.2(a)	Editorially revised

Page	*Location*	*Change*
	8.11.2.2.6	Editorially revised
	8.11.2.2.10	Added
	8.11.2.2.11	Added
	8.11.2.3.1	Last paragraph deleted
	8.11.2.3.2	Subparagraph (c) added
	8.11.2.3.3	Subparagraph (e) deleted
338–340	8.11.3.1.1	(1) Subparagraphs (d), (e), and (q) revised (2) Subparagraphs (v) through (x) added
	8.11.3.1.2	Revised in its entirety
	8.11.3.1.3	Revised in its entirety
	8.11.3.1.4	Subparagraphs (l) through (n) added
	8.11.3.1.5	(1) Subparagraphs (b) and (h) revised (2) Subparagraph (k) redesignated as (j) (3) New subparagraphs (k) through (p) added
	8.11.3.1.7	Added
	8.11.3.2.2	Title revised
	8.11.3.2.3	Subparagraphs (a), (f), and (h) revised
	8.11.3.2.4	Revised
	8.11.3.3.1	Revised
	8.11.3.4.5	Added
	8.11.4.1	(1) Subparagraphs (j), (m), and (s) revised (2) Subparagraphs (t) and (u) deleted (3) Subparagraph (v) redesignated as (t)
341	8.11.4.2.13	Second paragraph added
342	8.11.5.2	Title and first paragraph revised
345–350	Section 9.1	Editorially revised
351, 352	Section 9.2	Address for GSA updated
358–365	Nonmandatory Appendix E	Revised in its entirety
379	Nonmandatory Appendix J	Deleted and replaced with new Appendix
381–385	Nonmandatory Appendix L	Revised

SPECIAL NOTE:

The interpretations to ASME A17.1 issued between July 2004 through June 2006 follow the last page of this edition as a separate supplement, Interpretation No. 28.

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SAFETY CODE FOR ELEVATORS AND ESCALATORS

Part 1
General

SECTION 1.1
SCOPE

(07) 1.1.1 Equipment Covered by this Code

This Code covers the design, construction, operation, inspection, testing, maintenance, alteration, and repair of the following equipment and its associated parts, rooms, spaces, and hoistways, where located in or adjacent to a building or structure (see 1.2):

(a) hoisting and lowering mechanisms, equipped with a car, that move between two or more landings. This equipment includes, but is not limited to elevators (see 1.3).

(b) power-driven stairways and walkways for carrying persons between landings. This equipment includes, but is not limited to escalators and moving walks (see 1.3).

(c) hoisting and lowering mechanisms equipped with a car that serves two or more landings and is restricted to the carrying of material by its limited size or limited access to the car. This equipment includes, but is not limited to dumbwaiters and material lifts (see 1.3).

(07) 1.1.2 Equipment Not Covered by this Code (ED)

Equipment not covered by this Code includes, but is not limited to, the following:

(a) personnel hoists within the scope of ANSI A10.4 and CSA-Z185

(b) material hoists within the scope of ANSI A10.5 and CSA-Z256

(c) platform lifts and stairway chairlifts within the scope of ASME A18.1, CSA B355, and CSA B613

(d) manlifts within the scope of ASME A90.1 and CSA B311, and in jurisdictions enforcing NBCC Special Purpose Personnel Elevators (ASME A17.1, Section 5.7)

(e) mobile scaffolds and towers; platforms within the scope of ANSI/SIA A92 and CSA-B354

(f) powered platform and equipment for exterior and interior building maintenance within the scope of ASME A120.1 and CSA-Z271

(g) conveyors and related equipment within the scope of ASME B20.1

(h) cranes, derricks, hoists, hooks, jacks, and slings within the scope of ASME B30, CSA Z150, CSA B167, CSA Z202, and CSA Z248

(i) industrial trucks within the scope of ASME B56 and CSA B335

(j) portable equipment, except for portable escalators, that are covered by 6.1

(k) tiering or piling machines used to move material to and from storage located and operating entirely within one story

(l) equipment for feeding or positioning material at machine tools, printing presses, etc.

(m) skip or furnace hoists

(n) wharf ramps

(o) amusement devices

(p) stage and orchestra lifts

(q) lift bridges

(r) railroad car lifts and dumpers

(s) mechanized parking garage equipment

(t) line jacks, false cars, shafters, moving platforms, and similar equipment used for installing an elevator

(u) platform elevators installed in a ship or offshore drilling rig and used for the purpose of loading and unloading cargo, equipment, and personnel

(v) dock levelers (freight platform lifts) having a rise of 500 mm (20 in.) or less

(w) in Canadian jurisdictions, devices having a rise of 2 000 mm (79 in.) or less and used only for the transfer of materials or equipment

(x) in jurisdictions enforcing NBCC, mine elevators within the scope of 5.9

1.1.3 Application of Parts

This Code applies to new installations only, except Part 1, and 5.10, 8.1, 8.6, 8.7, 8.8, 8.9, 8.10, and 8.11, that apply to both new and existing installations.

1.1.4 Effective Date

The requirements of this edition and subsequent addenda to the Code are effective as of the date noted on the copyright page of this document. The authority

having jurisdiction will establish the effective date for their local regulations.

(07)

SECTION 1.2
PURPOSE AND EXCEPTIONS

1.2.1 Purpose

The purpose of this Code is to provide for the safety of life and limb, and to promote the public welfare. Compliance with this Code shall be achieved by

(a) conformance with the requirements in ASME A17.1/CSA B44; or

(b) conformance with some of the requirements in ASME A17.1/CSA B44 and for systems, subsystems, components, or functions that do not conform with certain requirements in ASME A17.1/CSA B44, conform with the applicable requirements in ASME A17.7/CSA B44.7; or

(c) conformance with the requirements in ASME A17.7/CSA B44.7

1.2.2 Exceptions to ASME A17.1

The provisions of this Code 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 Code, provided that there is technical documentation to demonstrate the equivalency of the system, method, or device.

1.2.2.1 The specific requirements of this Code 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 Code.

1.2.2.2 This Code contains requirements that are also covered in the National Building Code of Canada (NBCC). Reference to the NBCC is recognition that said requirements are not within the scope of this Code in Canada.

In jurisdictions not enforcing the NBCC, the use of the NBCC is not intended.

1.2.2.3 Exceptions shall be based on the requirements of 1.2.2.1.

(07)
(05S)

SECTION 1.3
DEFINITIONS

Section 1.3 defines various terms used in this Code. In addition, some nomenclature and terminology used in the elevator industry and other ASME publications are defined.

access switch: see *hoistway access switch.*

alteration: any change to equipment, including its parts, components, and/or subsystems, other than maintenance, repair, or replacement.

alteration, as part of an: a repair or replacement that is included with other work that is classified as an alteration.

alternate level: a floor level identified by the building code or fire authority, other than the designated level.

annunciator, car: an electrical device in the car that indicates visually the landings at which an elevator landing signal registering device has been actuated.

applied frame entrance: a wraparound or partial addition to an existing entrance frame used to improve the appearance or to provide the required clearances.

approved: acceptable to the authority having jurisdiction.

authority having jurisdiction: the organization, office, or individual responsible for enforcement of this Code. Where compliance with this Code has been mandated by legislation or regulation, the "authority having jurisdiction" is the regulatory authority (see *regulatory authority)*.

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

automatic transfer device: a power-operated mechanism that automatically moves a load consisting of a cart, tote box, pallet, wheeled vehicle, box, or other similar object from and/or to the car.

auxiliary power lowering device: an alternatively powered auxiliary control system that will, upon failure of the main power supply, allow a hydraulic elevator to descend to a lower landing.

brake, driving machine, elevator, dumbwaiter, or material lift: an electromechanically or electrohydraulically released spring, or gravity applied device, that is part of the electric driving machine of the elevator, dumbwaiter, or material lift used to apply a controlled force at a braking surface to hold or retard the elevator, dumbwaiter, or material lift. See Nonmandatory Appendix F.

electrohydraulically released: a means of release in which an electric current applied to a solenoid valve or the motor of a hydraulic pump directs pressurized hydraulic fluid to an actuator (such as a hydraulic jack) that overcomes a resisting force (such as a spring) as long as the electric current flows.

electromechanically released: a means of release in which an electric current applied to an actuator (such as a solenoid) causes an electromagnetic force that overcomes a resisting force (such as a spring) as long as the electric current flows.

brake, driving machine, escalator, or moving walk: an electromechanical device that is part of the electric driving machine of the escalator or moving walk, used to