

ASME A17.3-2023
(Revision of ASME A17.3-2020)

Safety Code for Existing Elevators and Escalators

**Includes Requirements for Electric and
Hydraulic Elevators and Escalators**

AN AMERICAN NATIONAL STANDARD



**The American Society of
Mechanical Engineers**

ASME A17.3-2023
(Revision of ASME A17.3-2020)

Safety Code for Existing Elevators and Escalators

**Includes Requirements for Electric and
Hydraulic Elevators and Escalators**

AN AMERICAN NATIONAL STANDARD



**The American Society of
Mechanical Engineers**

Two Park Avenue • New York, NY • 10016 USA

Date of Issuance: February 26, 2024

The next edition of this Code is scheduled for publication in 2026. This Code will become effective 6 months after the Date of Issuance.

This code or standard was developed under procedures accredited as meeting the criteria for American National Standards. The standards committee that approved the code or standard was balanced to ensure that individuals from competent and concerned interests had an opportunity to participate. The proposed code or standard was made available for public review and comment, which provided an opportunity for additional public input from industry, academia, regulatory agencies, and the public-at-large.

ASME does not “approve,” “certify,” “rate,” or “endorse” any item, construction, proprietary device, or activity. ASME 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 insure anyone utilizing a standard against liability for infringement of any applicable letters patent, nor does ASME assume any such liability. Users of a code or standard are expressly advised that determination of the validity of any such patent rights, and the risk of infringement of such rights, is entirely their own responsibility.

Participation by federal agency representatives or persons affiliated with industry is not to be interpreted as government or industry endorsement of this code or standard.

ASME accepts responsibility for only those interpretations of this document issued in accordance with the established ASME procedures and policies, which precludes the issuance of interpretations by individuals.

The endnotes and preamble in this document (if any) are part of this American National Standard.



ASME Collective Membership Mark

All rights reserved. “ASME” and the above ASME symbol are registered trademarks of The American Society of Mechanical Engineers. No part of this document may be copied, modified, distributed, published, displayed, or otherwise reproduced in any form or by any means, electronic, digital, or mechanical, now known or hereafter invented, without the express written permission of ASME. No works derived from this document or any content therein may be created without the express written permission of ASME. Using this document or any content therein to train, create or improve any artificial intelligence and/or machine learning platform, system, application, model, or algorithm is strictly prohibited.

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

Copyright © 2024 by
THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS
Printed in U.S.A.

CONTENTS

Foreword	v
Committee Roster	iii
Correspondence With the A17 Committee	xv
Preface	xv
Summary of Changes	xviii
Part I	
Introduction	1
Section 1.1	1
Section 1.2	1
Section 1.3	2
Section 1.4	2
Section 1.5	18
Section 1.6	18
Part II	
Hoistways and Related Construction for Electric Elevators	20
Scope	20
Section 2.1	20
Section 2.2	21
Section 2.3	22
Section 2.4	23
Section 2.5	23
Section 2.6	24
Section 2.7	26
Section 2.8	28
Part III	
Machinery and Equipment for Electric Elevators	29
Scope	29
Section 3.1	29
Section 3.2	29
Section 3.3	29
Section 3.4	30
Section 3.5	32
Section 3.6	33
Section 3.7	33
Section 3.8	35
Section 3.9	37
Section 3.10	38
Section 3.11	41
Section 3.12	41
Section 3.13	43

Part IV	Hydraulic Elevators	45
	Scope	45
Section 4.1	Hoistway, Hoistway Enclosures, and Related Construction	45
Section 4.2	Mechanical Equipment	45
Section 4.3	Driving Machines	45
Section 4.4	Valves, Supply Piping, and Fittings	46
Section 4.5	Tanks	46
Section 4.6	Terminal Stopping Devices	46
Section 4.7	Operating Devices and Control Equipment	47
Section 4.8	Additional Requirements for Counterweighted Hydraulic Elevators	47
Section 4.9	Additional Requirements for Roped-Hydraulic Elevators	47
Part V	Escalators	49
	Scope	49
Section 5.1	Construction	49
Section 5.2	Brakes	50
Section 5.3	Operating and Safety Devices	50
Section 5.4	Lighting of Escalators	52
Section 5.5	Entrance and Egress Ends	53
Part VI	Dumbwaiters	54
	Scope	54
Section 6.1	Hoistway, Hoistway Enclosures, and Related Construction	54
Section 6.2	Machinery and Equipment for Hand and Electric Dumbwaiters	55
Section 6.3	Machinery and Equipment for Hydraulic Dumbwaiters	57
Part VII	Hand Elevators	59
	Scope	59
Section 7.1	Hoistway, Hoistway Enclosures, and Related Construction	59
Section 7.2	Machinery and Equipment	60
Part VIII	Sidewalk Elevators	62
	Scope	62
Section 8.1	Hoistway, Hoistway Enclosures, and Machine Rooms	62
Section 8.2	Machinery and Equipment	63
Part IX	Moving Walkways	65
	Scope	65
Section 9.1	Protection of Floor Openings	65
Section 9.2	Protection of Supports and Machine Spaces Against Fire	65
Section 9.3	Construction Requirements	65
Section 9.4	Entrance and Egress Ends	66
Section 9.5	Driving Machine, Motor, and Brake	66
Section 9.6	Operating and Safety Devices	67
Section 9.7	Lighting and Access	68
Part X	Private Residence Elevators	69
	Scope	69
Section 10.1	Hoistway, Hoistway Enclosures, and Related Construction	69
Section 10.2	Cars	71
Section 10.3	Counterweights	72

Section 10.4	Safeties and Governors	73
Section 10.5	Car and Counterweight Guide Rails and Fastenings	73
Section 10.6	Car and Counterweight Buffers	73
Section 10.7	Driving Machines, Sheaves, and Their Supports	73
Section 10.8	Terminal Stopping Devices	75
Section 10.9	Operating Devices and Control Equipment	75
Section 10.10	Emergency Signal Devices	75
Section 10.11	Limitation of Load, Speed, and Rise	76
Section 10.12	Marking Plates	76
Section 10.13	Suspension Means	76

Nonmandatory Appendices

A	Distances Between Hoistway Doors and Car Doors or Gates	78
B	Types of Roped-Hydraulic Elevators	83
C	ASME/ANSI A17.1-1987, Rules 211.3–211.8 (See 3.11.3)	84
D	Rack and Pinion Machines (ASME/ANSI A17.1-1987, Rules 208.3–208.4d, and Rule 1200.4e)	87
E	Ascending Car Overspeed and Unintended Car Movement Protection	89

Index	93
--------------	-------	----

Figures

3.7.1-1	Inside Net Platform Areas for Passenger Elevators	34
5.3.11-1	Caution Sign	52
A-1	Distance Between Swinging Hoistway Doors and Car Doors and Gates	78
A-2	Distance Between Sliding Hoistway Doors and Car Doors and Gates	79
A-3	Typical Sliding Hoistway Door Space Guard and Sight Guard	80
A-4	Typical Swinging Hoistway Door Space Guards	81
A-5	Typical Space Guard for Swinging Doors With Cutout for Doorknob, Handle, or Pull Bar	82
B-1	Pusher-Type Roped-Hydraulic Elevators	83
B-2	Puller-Type Roped-Hydraulic Elevators	83
E-1	Ascending Car Overspeed Protection	91
E-2	Unintended Car Movement Protection	92

Tables

1.6-1	Reference Documents	19
1.6-2	Procurement Information	19
3.7.1	Maximum Inside Net Platform Areas for the Various Rated Loads	34
3.11.3-1	Minimum Factors of Safety for Suspension Wire Ropes	42
E-1	Traction Elevator Brake Type, Function, and Performance	90

FOREWORD

The American Society of Mechanical Engineers (ASME) has published since 1921 a safety code for elevators, escalators, and related equipment. The following is a brief history of how the various editions of this Code addressed the matter of retroactive requirements for existing installations.

The 1921 edition did not differentiate between new and existing installations.

The second edition (1925) and third edition (1931) contained the following statements in their Introductions:

New and Old Installations. After the date on which the Code becomes effective, all new construction and installations shall conform to its provisions. Equipment installed prior to that date need not, however, be modified to conform to its rules except where required by the key number opposite the rule. Reference figures attached to the various rules or paragraphs indicate when such rules or paragraphs become effective when applied to existing installations as follows:

Key to Index Figures

(0) To be applied immediately.

(1) Not to be applied to existing installations.

(2) To be applied to existing installations only to the extent ordered by the administrative authority.

(3) To be applied to existing installations only to the extent ordered by the administrative authority.

(6) To be applied to existing installations six months after the adoption of this Code.

(12) To be applied to existing installations 1 year (12 months) after the adoption of this Code.

(24) To be applied to existing installations two years after the adoption of this Code.

This practice was discontinued with the fourth edition. Quoting from ASA A17.1-1937:

This Edition of the Code makes no reference to the application of the individual rules to Existing Installations, and the key numbers in the previous Edition have been omitted. This matter is left to the authorities drafting legal regulations, who are familiar with the local conditions. A too extensive retroactive application is not advisable in any case. The Code contains many rules intended to obviate minor hazards which can be easily eliminated in a new installation, but the change of an existing installation might involve a financial outlay entirely out of proportion to the benefits secured.

The Sectional Committee recommends that rules for hoistway-door interlocks, car-gate contacts, hoistway limit switches, and the entire Part VI (Inspection, Maintenance, and Operation) be made applicable to every installation already existing at the time of the adoption of the Code, and that provisions be made also to secure adequate under-car safeties for such installations.

This practice remained essentially unchanged through all later editions of the Code. Only the requirements for inspection, maintenance, alteration, repair, and replacement apply retroactively to existing installations. Quoting from the Preface of ANSI/ASME A17.1-1971:

Not all of the Rules of the Code apply to equipment installed prior to its adoption by jurisdictional authorities, but those which do apply to existing as well as to new installations are outlined under Scope in the Introduction.

The Code contains many Rules intended to obviate hazards which can be avoided in new installations; but, if such Rules were made to apply to existing installations, they would entail financial outlay out of proportion to the benefits derived.

In view of past accident experience resulting in serious injuries at hoistway and car entrances, it is recommended that, as a minimum, the Rules covering safety requirements for hoistway and car doors in this Code be made to also apply to existing elevator installations.

The accident experience on elevators has also indicated that accidents occur on the older existing equipment, especially with a winding-drum-type machine and where the car safety device and the terminal stopping devices are either absent or inadequate. It is, therefore,

recommended that adequate under-car safeties and terminal stopping devices be required for existing installations as well as new installations.

On the basis of experience supported by accident records, the jurisdictional authority adopting the Code should decide on what requirements, if any, are to be applied to existing installations.

Numerous state and local jurisdictions had taken this advice and developed their own codes for existing installations. The need for a nationally recognized consensus code for existing installations became evident and the ASME A17 Elevator and Escalator Committee undertook the task and issued the first edition of the A17.3 Safety Code for Elevators and Escalators in 1986.

The second edition of the Code incorporated the revisions in A17.3a-1989 as well as additional revisions.

The third edition of the Code incorporated the changes made in A17.3a-1991 and A17.3b-1992 as well as the revisions shown in its Summary of Changes. [Part VII](#), Hand Elevator, and [Part VIII](#), Sidewalk Elevator, appeared for the first time in that edition.

The fourth edition of the Code incorporated the changes made in A17.3a-1994 and A17.3b-1995 as well as the revisions shown in its Summary of Changes. [Part X](#), Private Residence Elevators, and [Nonmandatory Appendix D](#) appeared for the first time in that edition.

The fifth edition of the Code incorporated the changes made in A17.3a-2000 as well as the revisions shown in its Summary of Changes.

Issuance of addenda to ASME A17.3 was discontinued after publication of the fifth edition.

This twelfth edition of the Code incorporates the revisions shown in the Summary of Changes.

The following is a list of the final approval dates, dates of issuance, and effective dates for the previous and current editions and addenda:

	Editions and Addenda	Approved	Issued	Effective
First Edition	ASME/ANSI A17.3-1986	February 12, 1986	February 20, 1986	November 30, 1986
Addenda	ASME/ANSI A17.3a-1989	November 10, 1989	December 31, 1989	July 1, 1990
Second Edition	ASME A17.3-1990	October 8, 1990	December 31, 1990	July 1, 1991
Addenda	ASME A17.3a-1991	October 7, 1991	December 12, 1991	June 12, 1992
	ASME A17.3b-1992	October 16, 1992	December 15, 1992	June 16, 1993
Third Edition	ASME A17.3-1993	September 29, 1993	December 31, 1993	July 1, 1994
Addenda	ASME A17.3a-1994	August 18, 1994	November 30, 1994	June 1, 1995
Addenda	ASME A17.3b-1995	August 10, 1995	November 30, 1995	June 1, 1996
Fourth Edition	ASME A17.3-1996	October 3, 1996	February 20, 1997	August 21, 1997
Addenda	ASME A17.3a-2000	January 7, 2000	February 29, 2000	August 30, 2000
Fifth Edition	ASME A17.3-2002	March 12, 2002	July 22, 2002	January 22, 2003
Sixth Edition	ASME A17.3-2005	March 29, 2005	September 30, 2005	March 31, 2006
Seventh Edition	ASME A17.3-2008	July 16, 2008	January 9, 2009	July 9, 2009
Eighth Edition	ASME A17.3-2011	July 6, 2011	August 26, 2011	February 26, 2012
Ninth Edition	ASME A17.3-2015	April 17, 2015	August 28, 2015	February 28, 2016
Tenth Edition	ASME A17.3-2017	December 12, 2017	May 23, 2018	November 23, 2018
Eleventh Edition	ASME A17.3-2020	June 12, 2020	February 15, 2021	August 16, 2021
Twelfth Edition	ASME A17.3-2023	September 11, 2023	February 26, 2024	August 26, 2024

ASME A17 COMMITTEE ELEVATOR AND ESCALATORS

(November 2023)

STANDARDS COMMITTEE

H. E. Peelle III, *Chair*, The Peelle Co., Ltd.
D. Prince, *Vice Chair*, Motion Control Engineering
M. H. Tevyaw, *Vice Chair*, MHT Codes and Consulting
G. A. Burdeshaw, *Staff Secretary*, The American Society of Mechanical Engineers
E. V. Baker, National Elevator Industry Educational Program
D. L. Barker, California Division of Occupational Safety and Health
R. E. Baxter, California Division of Occupational Safety and Health
J. W. Blain, Edgett Williams Consulting Group
S. Bornstein, KONE, Inc.
P. R. Bothwell, Suzhou Hanson Elevator Co., Ltd.
K. L. Brinkman, National Elevator Industry, Inc.
J. W. Coaker, Coaker & Co., PC
J. Filippone, Consultant
R. A. Gregory, Vertex Corp.
P. Hampton, TK Elevator
J. T. Herrity, Department of the Navy, Naval Facilities Command (NAVFAC)
B. Horne, Otis Elevator
D. A. Kalgren, KONE, Inc.
J. W. Koshak, Elevator Safety Solutions, LLC
R. Kremer, Technical Standards and Safety Authority
D. McColl, Otis Canada, Inc.
D. McLellan, Technical Standards and Safety Authority
J. S. Rearick, Rearick & Co., Inc.
V. P. Robibero, RobiberoV Consultancy, LLC
J. Runyan, RobiberoV Consultancy, LLC
R. S. Seymour, Robert L. Seymour & Associates, Inc.
C. Shade, Ohio Department of Commerce
R. D. Shepherd, Retired
W. M. Snyder, VTE Solution, LLC
J. Xue, *Delegate*, Shanghai Institute of Special Equipment Inspection and Technical Research
D. S. Boucher, *Alternate*, KONE, Inc.
J. Carlson, *Alternate*, Schindler Elevator Corp.
L. W. Donaldson, *Alternate*, Department of the Navy, Naval Facilities Command (NAVFAC)
A. Ghazanchaei, *Alternate*, Otis Canada, Inc.
D. Griefenhagen, *Alternate*, International Union of Elevator Constructors
J. D. Henderson, *Alternate*, TK Elevator
N. Imbimbo, *Alternate*, Prysmian Group
J. Kleine, *Alternate*, Otis Elevator Co.
L. Metzinger, *Alternate*, Alimak Group USA, Inc.
D. Morrison, *Alternate*, California Division of Occupational Safety and Health
S. Reynolds, *Alternate*, The Peelle Co., Ltd.
C. Romero, *Alternate*, Motion Control Engineering, Inc.
P. S. Rosenberg, *Alternate*, Performance Elevator Consulting, LLC
K. Shelton, *Alternate*, KONE, Inc.
J. L. Stabler, *Alternate*, Stabler Associates, Inc.

HONORARY COMMITTEE

G. A. Burdeshaw, *Staff Secretary*
L. Bialy
E. A. Donoghue
B. J. Fanguy
C. E. Hempel
C. L. Kort
A. A. Mascone
E. M. Philpot
R. L. Rogers
L. E. White

REGULATORY ADVISORY COUNCIL

D. McLellan, *Chair*
G. Burdeshaw, *Secretary*
D. L. Barker
G. D. Barnes
G. E. Brewer
G. R. Brown
D. Bruce
J. H. Burpe
J. R. Carlini
R. Carvan
L. V. Donaldson
K. D. Doherty
C. Gardiner
L. A. Giovannetti
J. M. Gould
A. Guadamuz
W. J. Hartung
D. J. Hedgecock
G. A. Hutto
G. Johnson
N. Kavanagh
D. Leopard
S. MacArthur
C. C. Mann
D. L. McClare
J. McKernon
S. Mercier
M. Mitchell
J. Murnan
N. Ortiz
M. R. Poulin
J. P. Roche
E. Ryba
H. Schailer
P. Sorensen
K. R. Steeves
J. A. Stewart
M. K. Stewart
S. F. Stout
T. J. Trujillo
C. Updyke
J. L. Borwey, *Alternate*
J. Day, *Alternate*
L. Christensen, *Alternate*
D. Melvin, *Alternate*
D. Morris, *Alternate*

INTEREST REVIEW GROUP

G. A. Burdeshaw, *Staff Secretary*
J. P. Andrew
D. M. Begue
R. J. Blatz
M. T. Brierley
B. B. Calhoun
J. A. Caluori
M. A. Chavez
R. F. Dieter
D. L. Harris
R. Howkins
J. M. Imgarten
J. Inglis
T. Isaacs
Q. JianXiong
M. Krstanoski
W. R. Larsen
D. Mason
E. McClaskey
J. L. Meyer
B. Peyton
P. M. Puno
J. R. Runyan
J. L. Stabler
L. M. Taylor
D. L. Turner
K. Virk

CODE COORDINATION COMMITTEE

B. Horne, *Chair*
K. L. Brinkman, *Vice Chair*
G. A. Burdeshaw, *Staff Secretary*
K. Carr
J. Kleine
J. W. Koshak
M. A. Mueller

V. P. Robibero
A. Shelton
B. Tubbs
J. Xue
D. A. Kalgren, *Alternate*
R. Larson, *Alternate*
K. Paarlberg, *Alternate*

B44.1/A17.5 COMMITTEE ON ELEVATOR AND ESCALATOR ELECTRICAL EQUIPMENT

M. A. Mueller, *Chair*
M. Mihai, *Vice Chair*
G. Burdeshaw, *Staff Secretary*
G. Lee, *Secretary*
J. M. Aitamurto
J. D. Busse
S. J. Carlton
J. L. Della Porta
S. Dormann
R. Garcia
J. Kleine

S. Millett
C. Ramirez Woo
L. Yang
P. D. Barnhart, *Alternate*
K. Chieu, *Alternate*
M. Khalil, *Alternate*
P. F. McDermott, *Alternate*
S. Feng, *Contributing Member*
B. T. Irmacher, *Contributing Member*

AD HOC COMMITTEE FOR PERSONNEL SAFETY TO IMPROVE A17 REQUIREMENTS REGARDING EQUIPMENT

J. Filippone, *Chair*
D. S. Boucher, *Vice Chair*
E. Baker
R. Baxter
J. L. Borwey
K. L. Brinkman
M. Cleveland
G. DeCola
J. Gehl
J. D. Henderson
J. T. Herryty
B. Horne
D. Kalgren

R. Larson
J. A. Lowery, Jr.
N. J. McCann
M. J. Mellon, Jr.
J. Rearick
V. P. Robibero
H. S. Russell
R. C. Shumate
D. Smarte
J. Stabler
D. Vinette
M. H. Tevy, *Contributing Member*

AD HOC COMMITTEE ON DOOR PROTECTION

J. Kleine, *Chair*
N. Gomez, *Secretary*
J. Carlson
M. H. Davies
J. Koshak
R. Kremer
J. O'Keefe

A. Shupe
J. W. Stockstill
C. Walls
D. Kalgren, *Alternate*
C. Utke, *Alternate*
A. Wu, *Contributing Member*

ELEVATOR AND ATD COMMITTEE

L. C. Witt, *Chair*
J. B. Peskuski, *Vice Chair*
E. Dominguez, *Secretary*
R. A. Gregory

F. M. Hoch
M. Webster
G. Ziebell
S. Reynolds, *Alternate*

EARTHQUAKE SAFETY COMMITTEE

A. Shelton, *Chair*
W. C. Schadrack III, *Vice Chair*
N. Gomez, *Secretary*
L. J. Costas
J. D. Henderson
D. Kalgren
J. Kleine
E. McClaskey
J. L. Meyer
K. Michalik
G. M. Rees
W. C. Ribeiro
K. T. Wright, Sr.
T. D. Allen, *Alternate*

R. Larson, *Alternate*
M. A. Mueller, *Alternate*
C. A. Cullum, *Contributing Member*
R. K. Leckman, *Contributing Member*
E. N. Farsangi, *Contributing Member*
E. Powell, *Contributing Member*
A. J. Schiff, *Contributing Member*
R. Taylor, *Contributing Member*
J. A. Varona, *Contributing Member*

EDITORIAL COMMITTEE

K. L. Brinkman, *Chair*
G. Burdeshaw, *Secretary*
J. Filippone
D. McColl

M. A. Mueller
I. Kusan
W. Winkle, Jr.

ELECTRICAL COMMITTEE

J. W. Blair, *Chair*
J. P. Connelly, *Vice Chair*
E. Dominguez, *Secretary*
P. D. Barnhart
J. Beebe
B. Blackaby
J. D. Busse
J. Carlson
M. Flanagan
D. Griefenhagen
W. J. Hartung
J. D. Henderson
G. N. Henry
D. Holloway
J. Kleine
E. McClaskey
P. F. McDermott
M. Mihai
D. Morris
P. A. Novak
P. Ojapalo
D. Prince
J. C. Ramos
V. P. Robibero
J. R. Valone

K. Virk
L. B. Wells
L. Yang
E. M. Crane, *Alternate*
T. Evans, *Alternate*
S. R. James, *Alternate*
R. Larson, *Alternate*
N. J. McCann, *Alternate*
G. M. Rees, *Alternate*
E. Rittenhouse, *Alternate*
C. Romero, *Alternate*
B. Watson, *Alternate*
S. Dormann, *Contributing Member*
R. Elias, *Contributing Member*
Y. C. Ho, *Contributing Member*
P. C. Hoppie, *Contributing Member*
S. A. Khattak, *Contributing Member*
J. Koshak, *Contributing Member*
C. Mason, *Contributing Member*
P. M. Puno, *Contributing Member*
C. Ramirez Woo, *Contributing Member*

ELEVATORS USED FOR CONSTRUCTION COMMITTEE

J. R. Freeman, *Chair*
G. Burdeshaw, *Secretary*
R. Baxter
D. S. Boucher
G. DeCola
R. A. Gregory

K. Heling
J. A. Lowery, Jr.
N. Martin
H. Schaier
C. Zamfir
S. Bornstein, *Alternate*

EMERGENCY OPERATIONS COMMITTEE

J. Carlson, *Chair*
J. D. Henderson, *Vice Chair*
E. Dominguez, *Staff Secretary*
D. S. Boucher
K. L. Brinkman
K. B. Camp
D. P. Finnegan
D. Goldstein
S. R. James
J. T. Josoff
C. Koenig
J. Latham
M. Marks
D. McColl
A. Morris
J. Moseley
T. F. Norton
B. Peak
D. Prince
P. D. Rampf
J. Ramsey
V. R. Reisinger III
H. S. Russell
S. Sears
D. Smarte
J. W. Stockstill
C. Towski
M. Walls
D. C. Witt
T. P. Worthington

O. Y. Zhang
J. Bibby, *Alternate*
J. Kleine, *Alternate*
B. M. Krishnan, *Alternate*
K. Moody, *Alternate*
G. M. Rees, *Alternate*
C. Romero, *Alternate*
M. T. Brierley, *Contributing Member*
M. W. Bunker, Jr., *Contributing Member*
J. Canty, *Contributing Member*
G. B. Cassini, *Contributing Member*
C. S. Dart, *Contributing Member*
D. Holmes, *Contributing Member*
J. Koshak, *Contributing Member*
J. A. Marinelli, *Contributing Member*
W. Ouyang, *Contributing Member*
L. F. Richardson, *Contributing Member*
R. J. Roux, *Contributing Member*
J. K. Schimeck, *Contributing Member*
M. H. Tevyaw, *Contributing Member*
S. Weiss-Ishai, *Contributing Member*
L. Zheyi, *Contributing Member*

ESCALATOR AND MOVING WALK COMMITTEE

P. R. Bothwell, *Chair*
K. G. Hamby, *Vice Chair*
R. Mohamed, *Secretary*
C. Anayiotos
A. D. Clarke, Jr.
S. Dormann
C. P. Farnum
J. A. A. Fernandez Fidalgo
J. R. Freeman
B. Horne
S. Krase
T. F. Martel
N. J. McCann
D. McLellan
A. Morris
T. Paats
C. Rorabuck
E. Ryba
C. Shade
R. D. Shepherd
R. C. Shumate

J. Stabler
P. Velasquez, Jr.
M. P. Walsh
D. Winkelhake
L. Yang
S. Cowen, *Alternate*
J. Gonzalez, *Alternate*
A. Gotthardt, *Alternate*
R. F. Johnston, Jr., *Alternate*
A. Kenny, *Alternate*
S. D. Martin, *Alternate*
M. A. Mueller, *Alternate*
D. Perez, Jr., *Alternate*
A. Sharma, *Alternate*
J. Filippone, *Contributing Member*
N. Martin, *Contributing Member*
H. Shi, *Contributing Member*
D. L. Turner, *Contributing Member*
J. Xue, *Contributing Member*

EXISTING INSTALLATIONS COMMITTEE

D. LaBrecque, *Chair*
M. D. Morand, *Vice Chair*
T. Waardenburg, *Vice Chair*
N. Gomez, *Secretary*
L. Alley
R. Baxter
A. Clarke, Jr.
C. J. Duke
T. Edmonds
J. Filippone
J. R. Freeman
M. Gatje
A. T. Gazzaniga
R. A. Gregory
M. D. Janca
T. Jose
J. Koscielny
R. Kremer
J. A. Maxwell
P. McPartland
M. J. Mellon, Jr.
N. R. Mistry
K. P. Morse
N. Ortiz

R. A. Preston
S. A. Quinn
J. Rearick
P. Reid
V. P. Robibero
C. Roraback
J. Stabler
J. W. Stockstill
L. M. Taylor
H. Thurmer
H. M. Vyas
M. P. Walsh
S. Walters
C. Westphal
R. Henderson, *Alternate*
A. Hildalgo, *Alternate*
T. Scudiero, *Alternate*
H. F. Wagner, Jr., *Alternate*
J. H. Butler, *Contributing Member*
J. T. Herrity, *Contributing Member*
B. McCue, *Contributing Member*

GUIDE FOR EMERGENCY PERSONNEL COMMITTEE

G. DeCola, *Chair*
G. Burdeshaw, *Secretary*
J. L. Borwey
J. Day
G. DeCola
E. Kuhns
D. McLellan
M. P. Mintle
D. Morgan
P. Pettener

R. Seymour
M. H. Tevyaw
G. J. Zolnierczyk
Y. Cao, *Contributing Member*
D. P. Cook, *Contributing Member*
C. S. Dart, *Contributing Member*
D. L. Flint, *Contributing Member*
J. L. Meyer, *Contributing Member*
J. K. Schimeck, *Contributing Member*

HAND AND SIDEWALK ELEVATOR COMMITTEE

N. J. Montesano, *Chair*
G. A. Burdeshaw, *Staff Secretary*
V. G. Bahna
R. Carter
G. DeCola
J. Doyle

J. Duffy
G. Greenberg
E. L. Krull, Jr.
C. P. Robinson
G. West
B. Casas, *Alternate*

HOISTWAY COMMITTEE

D. S. Boucher, *Chair*
J. D. Henderson, *Vice Chair*
E. Dominguez, *Secretary*
L. J. Blaiotta, Jr.
K. L. Brinkman
J. Carlson
J. Forish
D. Goldstein
M. Hougendobler
J. T. Josoff
S. Kalola
J. Latham
J. Lengacher
D. McColl
J. O'Laughlin
D. P. Orlos
B. Peak
H. Peele III
V. R. Reisinger III
S. P. Reynolds
H. S. Russell
B. Schleeter
S. Sears
R. D. Shepherd
D. Smarte
J. W. Stockstill
B. K. Umbaugh
D. C. Witt

O. Y. Zhang
L. M. Choi, *Alternate*
T. Giannopoulos, *Alternate*
F. Leo, *Alternate*
K. Moody, *Alternate*
K. Sherrick, *Alternate*
J. L. Borwey, *Contributing Member*
J. Cole, *Contributing Member*
A. Conkling, *Contributing Member*
H. J. Gruszynski, *Contributing Member*
J. L. Harding, *Contributing Member*
D. Holmes, *Contributing Member*
B. Horne, *Contributing Member*
J. Kleine, *Contributing Member*
J. Koshak, *Contributing Member*
J. A. Marinelli, *Contributing Member*
A. Morris, *Contributing Member*
D. K. Quinn, *Contributing Member*
M. H. Tevyaw, *Contributing Member*
S. Weiss-Ishai, *Contributing Member*

INSPECTIONS COMMITTEE

M. D. Morand, *Chair*
J. R. Runyan, *Vice Chair*
R. Mohamed, *Staff Secretary*
G. D. Barnes
R. E. Baxter
J. L. Borwey
D. S. Boucher
K. L. Brinkman
J. W. Coaker
S. Cowen
J. Day
G. DeCola
M. V. Farinola
J. Filippone
M. Gatje
W. Geesink
P. Hampton
H. Z. Hamze
K. Heling
J. T. Herrity
N. Kavanagh
J. J. Knolmajer
N. B. Martin
J. A. Maxwell
D. McLellan

M. J. Mellon, Jr.
M. P. Mintle
E. R. Rogers
E. Ryba
R. S. Seymour
F. C. Slater
A. Smith
W. M. Snyder
J. L. Stabler
S. Swett
M. H. Tevyaw
A. D. Clarke, Jr., *Alternate*
C. M. Dodds, *Alternate*
E. Kuhns, *Alternate*
J. S. Rearick, *Alternate*
R. D. Schloss, *Alternate*
T. Scudiero, *Alternate*
J. W. Stockstill, *Alternate*
C. Archer, *Contributing Member*
C. McDilda, *Contributing Member*
H. Ouyang, *Contributing Member*
J. D. Rosenberger, *Contributing Member*
J. Xue, *Contributing Member*

HYDRAULIC COMMITTEE

J. W. Stockstill, *Chair*
V. R. Reisinger III, *Vice Chair*
A. Carrion, *Secretary*
D. Begue
S. A. Bruno
J. D. Henderson
R. Henderson
J. Koshak
R. Larson
J. A. Lowery, Jr.
L. Rigby
C. Roraback
K. Shepherd
J. L. Shrum
H. Simpkins
C. Strawn
W. C. Strawn

L. M. Taylor
M. P. Walsh
J. Williams
B. Horne, *Alternate*
S. Kalola, *Alternate*
P. J. Sampson, *Alternate*
L. Smallwood, *Alternate*
H. F. Wagner, Jr., *Alternate*
L. Bialy, *Contributing Member*
P. E. A. Burge, *Contributing Member*
A. Jahn, *Contributing Member*
M. G. Miller, *Contributing Member*
T. S. Mowrey, *Contributing Member*

INCLINED ELEVATOR COMMITTEE

J. T. Herrity, *Chair*
J. Filippone, *Vice Chair*
J. Rearick, *Vice Chair*
G. A. Burdeshaw, *Staff Secretary*
R. Boseley
M. J. Botzet
C. Buckley
J. R. Carrick
L. J. Costas

L. W. Donaldson
R. A. Gregory
D. Griefenhagen
L. MacLachlan
W. N. MacLachlan
R. J. Murphy
J. L. Stabler
H. Van Den Ende, *Alternate*

INTERNATIONAL STANDARDS COMMITTEE

H. Peelle III, *Chair*
G. A. Burdeshaw, *Secretary*
G. Antona
E. Baker
F. Belio, Jr.
J. L. Borwey
K. L. Brinkman
J. W. Coaker
P. Hampton
J. T. Herrity
D. Kalgren
J. Kleine
E. McClaskey
J. Rearick
V. P. Robibero
W. M. Snyder
D. Griefenhagen, *Alternate*
J. D. Henderson, *Alternate*
C. A. Herrity, *Alternate*
P. D. Barnhart, *Contributing Member*
L. Bialy, *Contributing Member*
B. Blackaby, *Contributing Member*
S. Bornstein, *Contributing Member*

D. S. Boucher, *Contributing Member*
T. Derwinski, *Contributing Member*
L. W. Donaldson, *Contributing Member*
M. Farinola, *Contributing Member*
J. Filippone, *Contributing Member*
A. Ghazanachaei, *Contributing Member*
E. J. Hopp, *Contributing Member*
B. Horne, *Contributing Member*
A. Hsu, *Contributing Member*
J. Koshak, *Contributing Member*
V. Lakamraju, *Contributing Member*
G. P. Lorsbach, *Contributing Member*
G. Marathe, *Contributing Member*
J. A. Maxwell, *Contributing Member*
D. McColl, *Contributing Member*
D. McKee, *Contributing Member*
S. Parillo, *Contributing Member*
J. Popp, *Contributing Member*

LIMITED-USE/LIMITED-APPLICATION ELEVATOR COMMITTEE

R. J. Murphy, *Chair*
P. M. Isaac, *Vice Chair*
A. Carrion, *Staff Secretary*
K. L. Brinkman
P. Chance
J. R. Freeman
K. L. Heyungs
F. M. Hoch
S. J. Mehalko
J. E. Newstrom
W. Richardson
F. C. Slater

R. B. Weber
D. M. Winkle, Jr.
G. Ziebel
P. Austin, *Alternate*
S. A. Bruno, *Alternate*
D. Jaeger, *Alternate*
H. H. Bippen, Jr., *Contributing Member*
J. P. Schumacher, *Contributing Member*
F. Slater, *Contributing Member*

MAINTENANCE, REPAIR, AND REPLACEMENT COMMITTEE

D. LaBrecque, *Chair*
R. Baxter, *Vice Chair*
J. W. Stockstill, *Vice Chair*
N. Gomez, *Secretary*
L. Alley
C. J. Duke
T. Edmonds
M. Farinola
J. Filippone
J. R. Freeman
M. Gatje
S. P. Greene
R. A. Gregory
M. D. Janca
T. Jose
R. Kremer
K. Langereis
Q. Matthews
P. McPartland
M. J. Mellon, Jr.
N. R. Mistry
M. D. Morand
K. P. Morse
N. Ortiz
R. A. Preston
J. Rearick
P. Reid
P. S. Rosenberg
J. Stabler
C. Strawn

L. M. Taylor
H. Thurmer
H. M. Vyas
T. Waardenburg
M. P. Walsh
S. Walters
C. Westphal
E. A. White
A. Clarke, Jr., *Alternate*
P. Hampton, *Alternate*
R. Henderson, *Alternate*
R. D. Schloss, *Alternate*
K. P. Sullivan, *Alternate*
H. F. Wagner, Jr., *Alternate*
J. J. De Lorenzi, *Contributing Member*
J. T. Herrity, *Contributing Member*
A. S. Hopkirk, *Contributing Member*
T. Jiang, *Contributing Member*
J. J. Knolmayer, *Contributing Member*
J. Koshak, *Contributing Member*
D. McColl, *Contributing Member*
B. McCue, *Contributing Member*
C. McDilda, *Contributing Member*
J. L. Meyer, *Contributing Member*
V. P. Robibero, *Contributing Member*

MARINE ELEVATOR COMMITTEE

M. R. Tilyou, *Chair*
G. A. Burdeshaw, *Secretary*
D. Brady
E. J. Crawford

M. Gatje
E. P. Graff
R. E. Spranger
R. Wagner

MECHANICAL DESIGN COMMITTEE

B. Horne, *Chair*
M. P. Lamb, *Vice Chair*
N. Gomez, *Secretary*
E. Baker
D. L. Barker
F. Belio, Jr.
S. Conrey
A. M. Culver
P. Dreps
J. Duvall
J. Forish
A. Ghazanachaei
N. Imbimbo
P. M. Isaac
D. Kalgren
R. Kaspersma
R. J. Koeppe, Jr.
J. Koshak
R. Kremer
S. Lahmers
K. Langereis
E. McClaskey
D. Miller
M. Rhiner

C. Shade
A. Shelton
H. Simpkins
M. Sorisi
J. Thompson
B. K. Umbaugh
D. S. Boucher, *Alternate*
S. Chiripko, *Alternate*
T. J. Gray, *Alternate*
B. A. Johnson, *Alternate*
M. S. Johnson, *Alternate*
G. A. Wasik, *Alternate*
L. Bialy, *Contributing Member*
R. E. Creak, *Contributing Member*
J. Filippone, *Contributing Member*
R. K. Leckman, *Contributing Member*
D. P. Orlos, *Contributing Member*
W. Ouyang, *Contributing Member*
J. Stabler, *Contributing Member*
H. Wu, *Contributing Member*

MINE ELEVATOR COMMITTEE

N. Martin, *Chair*
L. M. Taylor, *Vice Chair*
N. Gomez, *Secretary*
A. R. Brower

T. D. Barkand, *Contributing Member*
R. M. Bates, *Contributing Member*
J. Rose, *Contributing Member*
M. P. Snyder, *Contributing Member*

NEW TECHNOLOGY COMMITTEE

D. McColl, *Chair*
R. Kaspersma, *Vice Chair*
G. A. Burdeshaw, *Secretary*
S. Bornstein
D. S. Boucher
K. L. Brinkman
D. Bruce
T. M. Chambers
J. W. Coaker
S. Cowen
A. M. Culver
T. Evans
K. Heling
J. D. Henderson
J. T. Herrity
D. Kalgren
J. Kleine
J. Koshak
G. Lee
K. McGettigan
J. L. Meyer

M. Mihai
D. Morgan
M. Pedram
J. C. Ramos
J. Rearick
V. P. Robibero
L. V. Schoenmaker
S. Steiner
D. Vinette
L. Yang
P. D. Barnhart, *Alternate*
R. Baxter, *Alternate*
M. Chan, *Alternate*
C. A. Herrity, *Alternate*
B. Horne, *Alternate*
M. Khalil, *Alternate*
C. Mason, *Alternate*
M. Walls, *Alternate*
L. Bialy, *Contributing Member*
H. Ruan, *Contributing Member*
H. Wu, *Contributing Member*

OUTSIDE EMERGENCY ELEVATOR COMMITTEE

V. P. Robibero, *Chair*
J. K. O'Donnell
H. E. Peelle III
J. R. Runyan
J. Shimshoni

R. F. Fahy, *Contributing Member*
D. M. Stanlaske, *Contributing Member*
G. Xu, *Contributing Member*

QUALIFICATION OF ELEVATOR INSPECTORS COMMITTEE

D. McLellan, *Chair*
M. D. Morand, *Vice Chair*
G. A. Burdeshaw, *Staff Secretary*
E. V. Baker
R. E. Baxter
J. L. Borwey
K. L. Brinkman
J. R. Brooks
M. Cleveland
J. W. Coaker
S. Cowen
J. Day
G. DeCola
L. W. Donaldson
D. Edwards
W. Geesink
P. Hampton
J. T. Herrity
N. Kavanagh
E. Kuhns
R. Larson
N. B. Martin
C. McDilda

M. J. Mellon, Jr.
M. P. Mintle
P. Pettener
E. R. Rogers
J. R. Runyan
R. S. Seymour
R. D. Shepherd
D. Smarte
W. M. Snyder
P. Sorenson
M. H. Tevyaw
D. J. Winslow
G. J. Zolnierczyk
C. M. Dodds, *Alternate*
D. Morgan, *Alternate*
C. Shade, *Alternate*
J. W. Stockstill, *Alternate*
D. L. Flint, *Contributing Member*
F. Liang, *Contributing Member*
H. Ouyang, *Contributing Member*
V. P. Robibero, *Contributing Member*

RACK-AND-PINION AND SPECIAL PURPOSE PERSONNEL ELEVATOR COMMITTEE

S. Harris, *Chair*
D. Higginbotham, *Vice Chair*
G. A. Burdeshaw, *Staff Secretary*
T. A. Gross, *Secretary*
T. D. Barkand
G. A. Butler
K. B. Camp
C. W. Cartwright II
M. Doenges

A. Harris
P. T. Isbell
S. E. Johnson
W. Kubik
M. D. Morand
K. M. Harrison, *Contributing Member*
R. Kaspersma, *Contributing Member*

CHINA INTERNATIONAL WORKING GROUP (IWG)

G. Shen, *Chair*
G. Liang, *Vice Chair*
Y. Xia, *Vice Chair*
G. A. Burdeshaw, *Staff Secretary*
Q. JianXiong, *Secretary*
Q. Dai
Z. Li
Y. Liang
G. Lu
L. Ning
L. Peng

Y. Shen
H. Shi
X. Shi
M. Wang
X. Wang
A. Wen
X. Wu
L. Yueyang
H. Zhang
X. Zhang

RESIDENCE ELEVATOR COMMITTEE

W. Richardson, *Chair*
P. Chance, *Vice Chair*
A. Carrion, *Secretary*
R. D. Baxter
M. B. Blomfield
R. Boseley
M. Dolan
J. R. Freeman
R. Gray
K. L. Heyungs
F. M. Hoch
C. Jones
L. Marley
S. J. Mehalko
R. J. Murphy
J. E. Newstrom
F. Panzarino
W. P. Rockhold
K. Virk
C. A. Warner
R. Weber
D. Winkle, Jr.
G. Ziebell
P. Austin, *Alternate*

S. A. Bruno, *Alternate*
D. Jaeger, *Alternate*
J. Phillips, *Alternate*
H. Van Den Ende, *Alternate*
K. L. Brinkman, *Contributing Member*
L. Katz, *Contributing Member*
T. C. Kingsley, *Contributing Member*
J. C. Lund, *Contributing Member*
M. W. McKinley, *Contributing Member*
W. M. McKinley, *Contributing Member*
J. Rearick, *Contributing Member*
C. D. Robinson, *Contributing Member*
J. P. Schumacher, *Contributing Member*
F. C. Slater, *Contributing Member*
F. Slater, *Contributing Member*
A. Wedderburn, *Contributing Member*

WIND TURBINE ELEVATOR COMMITTEE

L. Metzinger, *Chair*
J. W. Koshak, *Vice Chair*
R. Mohamed, *Staff Secretary*
V. Ayres
C. Barrett
F. Goeseke
J. D. Koch
G. Lee
D. Miseur
G. S. Pandher
J. S. Rearick
P. D. Smith
C. Strawn
S. Swett
G. Vanderploeg
L. Yang

C. E. Cuenin, *Alternate*
M. Khalil, *Alternate*
D. Swett, *Alternate*
P. S. Grewal, *Contributing Member*
J. T. Herrity, *Contributing Member*
R. Kaspersma, *Contributing Member*
K. Matharu, *Contributing Member*
L. V. Schoenmaker, *Contributing Member*
S. W. Weaver, *Contributing Member*

CORRESPONDENCE WITH THE A17 COMMITTEE

General. ASME codes and standards are developed and maintained by committees with the intent to represent the consensus of concerned interests. Users of ASME codes and standards may correspond with the committees to propose revisions or cases, report errata, or request interpretations. Correspondence for this Code should be sent to the staff secretary noted on the committee's web page, accessible at <https://go.asme.org/A17committee>.

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

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 Code 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 Code.

Interpretations. Upon request, the committee will issue an interpretation of any requirement of this Code. 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 Code 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 A17 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/A17committee>.

PREFACE

(23)

GENERAL

This Code is intended to serve as the basis for state and local jurisdictional authorities in adopting retroactive requirements for existing elevators and escalators to enhance the safety of the general public. 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 building owners and managers of structures where existing elevator equipment covered in the scope of the Code is used.

Operation and maintenance instructions in this Safety Code are intended for general applications. The equipment manufacturer or installer or both shall be consulted for specific operating or maintenance instructions.

FORM AND ARRANGEMENT

This Code consists of ten Parts, each covering a specific subject so as to facilitate reference to the requirements.

As an introduction in each Part, the Scope is described to clearly indicate the applicability of the requirements contained therein. Each requirement has been given an appropriate title with a number to facilitate referencing.

The Foreword, Preface, and Appendices that are included in this document have been approved by the A17 Committee, but are not part of this American National Standard.

METRIC (SI) UNITS

This edition of the Code contains metric (SI) units as well as imperial units. The SI units in the text have been directly (soft) converted from the imperial units. The tables and graphs have not been converted; however, the applicable conversion factors are included for each table and graph. Further information on the use of SI units is contained in ASTM E380, Metric Practice Guide, and ASME Guide SI-1, Orientation and Guide for Use of SI (Metric) Units.

Current committee policy is to have standards published with information in the form that will best serve the needs of Code users. It is not the intent of the Code to favor a design in SI units over one made in imperial units, or conversely. In converting to SI units, an effort has been made to maintain the precision of the original values so that the accuracy of the converted

values is neither exaggerated nor understated. Therefore, if there is a difference in the dimensions or the results of calculations between the two systems of units, the imperial units will govern.

RECOMMENDED ADOPTION PROCEDURES

Prior to an adoption of this Code, a public hearing should be held to permit all interested parties to voice objections they may have to particular Rules, and to provide an opportunity for the adopting authority to explain the reasons for such Rules. Many state laws and city ordinances require such hearings but even where not required, it is strongly recommended that hearings be held.

Drafts of the proposed Code should be made available to all interested parties at least 30 days prior to the date set for the public hearing.

The responsibility of complying with this Code rests with the owner of the existing installation. The owner may assign the responsibility to another party by contract. Authorities, in their legislation adopting this Code, should address this subject.

DATE OF APPLICATION

At the time of adoption of the Code, the authority having jurisdiction should determine the date existing installations must conform to the requirements.

It is recommended that a local committee, consisting of representatives of groups directly interested, be appointed to study the existing local conditions and to determine the length of time existing installations should be given between adoption of this Code and compliance with each provision.

Representatives of the following groups should be considered for serving on such a committee:

- (a) building owners
- (b) real estate management companies
- (c) architects and consulting engineers
- (d) manufacturers of the equipment
- (e) maintenance companies
- (f) insurance companies
- (g) city and state enforcement officials
- (h) elevator labor unions

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/sec	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/sec 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	V	volt
kPa	kilopascal		

ASME ELEVATOR PUBLICATIONS

The American Society of Mechanical Engineers (ASME) has developed and published safety codes and standards for elevators, escalators, and related equipment since the first edition of A17.1, Safety Code for Elevators and Escalators, which was published in 1921.

This Code is one of the numerous codes and standards that have been or are being developed by The American Society of Mechanical Engineers.

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

Tel: 800-843-2763
 Fax: 973-882-1717
 E-Mail: customercare@asme.org
 ASME Website: www.asme.org/shop

ASME A17.1/CSA B44, Safety Code for Elevators and Escalators. This American National Standard Safety Code covers the design, construction, installation, operation, testing, maintenance, alteration, and repair of elevators, dumbwaiters, escalators, moving walks, and material lifts.

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 periodic inspection and test requirements, as well as acceptance criteria.

Inspection Checklists. The checklist forms shown in ASME A17.2 are posted on the ASME website, www.asme.org.

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 as well as fire-fighters' service operating procedures.

CAN/CSA-B44.1/ASME A17.5 Elevator and Escalator Electrical Equipment. This Code contains requirements for obtaining, labeling, and listing of drive machine controllers, logic controllers, and operating devices for starting, stopping, regulating, controlling, or protecting electric motors, generators, and all other electrical equipment for elevators, escalators, moving walks, dumbwaiters, wheelchair lifts, and stairway 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.

ASME A17.1/CSA B44 Handbook. This Handbook augments the ASME A17.1 and CSA B44 Codes with commentary, diagrams, and illustrations that are intended to explain the requirements of these Codes.

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

ASME 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 Code. It also includes requirements for the accreditation of organiza-

tions 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.

ASME A17.3-2023

SUMMARY OF CHANGES

Following approval by the ASME A17 Standards Committee and ASME, and after public review, ASME A17.3-2023 was approved by the American National Standards Institute on September 11, 2023.

ASME A17.3-2023 includes the following changes identified by a margin note, **(23)**.

<i>Page</i>	<i>Location</i>	<i>Change</i>
xiv	Correspondence With the A17 Committee	Added
xv	Preface	Revised
19	Table 1.6-1	References to ASME A17.1/CSA B44 updated
19	Table 1.6-2	Editorially revised
20	2.1.4	(1) In 2.1.4.1(e), in-text note revised and redesignated as subpara. (f) (2) 2.1.4.2(b) revised
22	2.2.5	(1) First paragraph revised (2) In subpara. (c)(2), in-text note revised and redesignated as subpara. (d)
22	2.3.1	Subparagraph (d) added
23	2.5.1	Designator and title added
25	2.6.8	Added
29	3.1.1	Designator and title added
29	3.2.1	Designator and title added
36	3.8.5.2	Subparagraph (i)(3)(-b) revised
38	3.10.4	Subparagraph (v) added
43	3.12.8	Revised
47	4.8.1	Designator and title added
50	5.1.11	(1) Subparagraph (a) revised (2) Subparagraph (c)(2) added and former (c)(2) revised and redesignated as (c)(3)
52	5.3.13	Added
52	5.4.1	Designator and title added
56	6.2.12	Subparagraph (f) revised by errata
57	6.2.18	Revised
57	6.3.7	Cross-references corrected by errata
57	6.3.9	Cross-references corrected by errata
57	6.3.10	Cross-reference corrected by errata
58	6.3.10.2	Cross-references corrected by errata
58	6.3.11	Cross-references corrected by errata
60	7.2.4	Subparagraphs (a) revised
60	7.2.6	Subparagraph (c) revised

<i>Page</i>	<i>Location</i>	<i>Change</i>
61	7.2.11	Revised
68	9.6.14	Added
70	10.1.4.2	Subparagraphs (c)(1), (c)(3), (c)(6), and (c)(9) revised
93	Index	Updated

INTENTIONALLY LEFT BLANK

Part I

Introduction

SECTION 1.1 SCOPE

1.1.1 Equipment Covered by This Code

This Code of safety standards covers existing elevators, escalators, and their hoistways (except as modified by 1.1.2).

1.1.2 Equipment Not Covered by This Code

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

- (a) personnel hoists within the scope of ANSI A10.4
- (b) material hoists within the scope of ANSI A10.5
- (c) manlifts within the scope of ASME A90.1
- (d) mobile scaffolds, towers, and platforms within the scope of ANSI A92
- (e) powered platform and equipment for exterior and interior building maintenance within the scope of ASME A120.1
- (f) conveyors and related equipment within the scope of ASME B20.1
- (g) cranes, derricks, hoists, hooks, jacks, and slings within the scope of ASME B30
- (h) industrial trucks within the scope of ASME B56
- (i) portable equipment
- (j) tiering or piling machines used to move material to and from storage located and operating entirely within one story
- (k) equipment for feeding or positioning material at machine tools, printing presses, etc.
- (l) skip or furnace hoists
- (m) wharf ramps
- (n) amusement devices
- (o) stage and orchestra lifts
- (p) lift bridges
- (q) railroad car lifts or dumpers
- (r) mechanized parking garage equipment
- (s) mine elevators not located in or adjacent to a building or structure
- (t) line jacks, false cars, shafters, moving platforms, and similar equipment used for installing an elevator
- (u) inclined elevators within the scope of ASME A17.1/CSA B44
- (v) special purpose personnel elevators within the scope of ASME A17.1/CSA B44

(w) material lifts and dumbwaiters with automatic transfer devices within the scope of ASME A17.1/CSA B44

(x) screw column elevators within the scope of ASME A17.1/CSA B44

(y) elevators used for construction within the scope of ASME A17.1/CSA B44

(z) inclined stairway chairlifts and inclined and vertical wheelchair lifts within the scope of ASME A18.1

(aa) private residence inclined stairway chairlifts and inclined and vertical wheelchair lifts within the scope of ASME A18.1

(bb) rack-and-pinion elevators within the scope of ASME A17.1/CSA B44

(cc) marine elevators within the scope of ASME A17.1/CSA B44

(dd) rooftop elevators within the scope of ASME A17.1/CSA B44

(ee) limited-use/limited-application elevators within the scope of ASME A17.1/CSA B44

(ff) equipment conforming to ASME A17.1-2000 and later editions

SECTION 1.2 APPLICATION OF CODE

There are specific requirements for existing installations in this Code that could differ from those found in the latest or previous editions of ASME A17.1/CSA B44.

Existing installations, as a minimum, shall meet the requirements of this Code or ASME A17.1/CSA B44 or ASME A17.7/CSA B44.7 (see Section 1.3). If an existing installation does not meet the requirements of this Code, it shall be upgraded. If an existing installation was required to meet more stringent requirements, it shall continue to meet those requirements.

Existing installations shall also meet the following requirements in the current edition of ASME A17.1/CSA B44:

- (a) Section 8.1, Security.
- (b) Section 8.6, Maintenance, Repair, Replacement, and Testing.
- (c) Section 8.7, Alterations. Alterations, if made, shall conform to the applicable requirements of this Section. The applicable requirements in ASME A17.1/CSA B44, Section 8.7, could be more stringent than the