



ASME A17.8-2021/CSA B44.8:21
National Standard of Canada
American National Standard



Standard for wind turbine tower elevators



Legal Notice for Harmonized Standard Jointly Developed by ASME and CSA Group

Intellectual property rights and ownership

As between The American Society of Mechanical Engineers ("ASME") and Canadian Standards Association (operating as "CSA Group") (collectively "ASME and CSA Group") and the users of this document (whether it be in printed or electronic form), ASME and CSA Group are the joint owners of all works contained herein that are protected by copyright, all trade-marks (except as otherwise noted to the contrary), and all inventions and trade secrets that may be contained in this document, whether or not such inventions and trade secrets are protected by patents and applications for patents. The unauthorized use, modification, copying, or disclosure of this document may violate laws that protect the intellectual property of ASME and CSA Group and may give rise to a right in ASME and CSA Group to seek legal redress for such use, modification, copying, or disclosure. ASME and CSA Group reserve all intellectual property rights in this document.

Disclaimer and exclusion of liability

This document is provided without any representations, warranties, or conditions of any kind, express or implied, including, without limitation, implied warranties or conditions concerning this document's fitness for a particular purpose or use, its merchantability, or its non-infringement of any third party's intellectual property rights. ASME and CSA Group do not warrant the accuracy, completeness, or currency of any of the information published in this document. ASME and CSA Group make no representations or warranties regarding this document's compliance with any applicable statute, rule, or regulation.

IN NO EVENT SHALL ASME AND CSA GROUP, THEIR RESPECTIVE VOLUNTEERS, MEMBERS, SUBSIDIARIES, OR AFFILIATED COMPANIES OR THEIR EMPLOYEES, DIRECTORS, OR OFFICERS, BE LIABLE FOR ANY DIRECT, INDIRECT, OR INCIDENTAL DAMAGES, INJURY, LOSS, COSTS, OR EXPENSES, HOWSOEVER CAUSED, INCLUDING BUT NOT LIMITED TO SPECIAL OR CONSEQUENTIAL DAMAGES, LOST REVENUE, BUSINESS INTERRUPTION, LOST OR DAMAGED DATA, OR ANY OTHER COMMERCIAL OR ECONOMIC LOSS, WHETHER BASED IN CONTRACT, TORT (INCLUDING NEGLIGENCE), OR ANY OTHER THEORY OF LIABILITY, ARISING OUT OF OR RESULTING FROM ACCESS TO OR POSSESSION OR USE OF THIS DOCUMENT, EVEN IF ASME OR CSA GROUP HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, INJURY, LOSS, COSTS, OR EXPENSES.

In publishing and making this document available, ASME and CSA Group are not undertaking to render professional or other services for or on behalf of any person or entity or to perform any duty owed by any person or entity to another person or entity. The information in this document is directed to those who have the appropriate degree of experience to use and apply its contents, and ASME and CSA Group accept no responsibility whatsoever arising in any way from any and all use of or reliance on the information contained in this document.

ASME and CSA Group have no power, nor do they undertake, to enforce compliance with the provisions of the standards or other documents they jointly publish.

Authorized use of this document

This document is being provided by ASME and CSA Group for informational and non-commercial use only. The user of this document is authorized to do only the following:

If this document is in electronic form:

- load this document onto a computer for the sole purpose of reviewing it;
- search and browse this document; and
- print this document if it is in PDF format.

Limited copies of this document in print or paper form may be distributed only to persons who are authorized by ASME and CSA Group to have such copies, and only if this Legal Notice appears on each such copy.

In addition, users may not and may not permit others to:

- alter this document in any way or remove this Legal Notice from the attached standard;
- sell this document without authorization from ASME and CSA Group; or
- make an electronic copy of this document.

If you do not agree with any of the terms and conditions contained in this Legal Notice, you may not load or use this document or make any copies of the contents hereof, and if you do make such copies, you are required to destroy them immediately. Use of this document constitutes your acceptance of the terms and conditions of this Legal Notice.



Standards Update Service

ASME A17.8-2021/CSA B44.8:21 December 2021

Title: *Standard for wind turbine tower elevators*

To register for e-mail notification about any updates to this publication

- go to www.csagroup.org/store/
- click on **Product Updates**

The **List ID** that you will need to register for updates to this publication is **24296.1**

If you require assistance, please e-mail techsupport@csagroup.org or call 416-747-2233.

Visit CSA Group's policy on privacy at www.csagroup.org/legal to find out how we protect your personal information.

Canadian Standards Association (operating as “CSA Group”), under whose auspices this National Standard has been produced, was chartered in 1919 and accredited by the Standards Council of Canada to the National Standards system in 1973. It is a not-for-profit, nonstatutory, voluntary membership association engaged in standards development and certification activities.

CSA Group standards reflect a national consensus of producers and users — including manufacturers, consumers, retailers, unions and professional organizations, and governmental agencies. The standards are used widely by industry and commerce and often adopted by municipal, provincial, and federal governments in their regulations, particularly in the fields of health, safety, building and construction, and the environment.

More than 10 000 members indicate their support for CSA Group’s standards development by volunteering their time and skills to Committee work.

CSA Group offers certification and testing services in support of and as an extension to its standards development activities. To ensure the integrity of its certification process, CSA Group regularly and continually audits and inspects products that bear the CSA Group Mark.

In addition to its head office and laboratory complex in Toronto, CSA Group has regional branch offices in major centres across Canada and inspection and testing agencies in fourteen countries. Since 1919, CSA Group has developed the necessary expertise to meet its corporate mission: CSA Group is an independent service organization whose mission is to provide an open and effective forum for activities facilitating the exchange of goods and services through the use of standards, certification and related services to meet national and international needs.

For further information on CSA Group services, write to
CSA Group
178 Rexdale Boulevard
Toronto, Ontario, M9W 1R3
Canada

A National Standard of Canada is a standard developed by a Standards Council of Canada (SCC) accredited Standards Development Organization, in compliance with requirements and guidance set out by SCC. More information on National Standards of Canada can be found at www.scc.ca.

SCC is a Crown corporation within the portfolio of Innovation, Science and Economic Development (ISED) Canada. With the goal of enhancing Canada’s economic competitiveness and social well-being, SCC leads and facilitates the development and use of national and international standards. SCC also coordinates Canadian participation in standards development, and identifies strategies to advance Canadian standardization efforts.

Accreditation services are provided by SCC to various customers, including product certifiers, testing laboratories, and standards development organizations. A list of SCC programs and accredited bodies is publicly available at www.scc.ca.

Standards Council of Canada
600-55 Metcalfe Street
Ottawa, Ontario, K1P 6L5
Canada



La norme nationale du Canada n'est disponible qu'en anglais.

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

**A trademark of the Canadian Standards Association, operating as “CSA Group”*

CSA Group

The Canadian Standards Association (operating as "CSA Group"), under whose auspices this National Standard has been produced, was chartered in 1919 and accredited by the Standards Council of Canada to the National Standards system in 1973. It is a not-for-profit, nonstatutory, voluntary membership association engaged in standards development and certification activities.

CSA Group standards reflect a national consensus of producers and users including manufacturers, consumers, retailers, unions and professional organizations, and governmental agencies. The standards are used widely by industry and commerce and often adopted by municipal, provincial, and federal governments in their regulations, particularly in the fields of health, safety, building and construction, and the environment.

More than 10 000 members indicate their support for CSA Group's standards development by volunteering their time and skills to Committee work.

CSA Group offers certification and testing services in support of and as an extension to its standards development activities. To ensure the integrity of its certification process, CSA Group regularly and continually audits and inspects products that bear the CSA Group Mark.

In addition to its head office and laboratory complex in Toronto, CSA Group has regional branch offices in major centres across Canada and inspection and testing agencies in fourteen countries. Since 1922, CSA Group has developed the necessary expertise to meet its corporate mission: CSA Group is an independent service organization whose mission is to provide an open and effective forum for activities facilitating the exchange of goods and services through the use of standards, certification and related services to meet national and international needs.

For further information on CSA Group services, write to
CSA Group
178 Rexdale Boulevard, Toronto, Ontario,
Canada M9W 1R3

American National Standards Institute

The American National Standards Institute (ANSI), Inc. is the nationally recognized coordinator of voluntary standards development in the United States through which voluntary organizations, representing virtually every technical discipline and every facet of trade and commerce, organized labor and consumer interests, establish and improve the some 10 000 national consensus standards currently approved as American National Standards.

ANSI provides that the interests of the public may have appropriate participation and representation in standardization activity, and cooperates with departments and agencies of U.S. Federal, State and local governments in achieving compatibility between government codes and standards and the voluntary standards of industry and commerce.

ANSI represents the interests of the United States in international nontreaty organizations such as the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC). The Institute maintains close ties with regional organizations such as the Pacific Area Standards Conference (PASC) and the Pan American Standards Commission (COPANT). As such, ANSI coordinates the activities involved in the U.S. participation in these groups.

ANSI approval of standards is intended to verify that the principles of openness and due process have been followed in the approval procedure and that a consensus of those directly and materially affected by the standards has been achieved. ANSI coordination is intended to assist the voluntary system to ensure that national standards needs are identified and met with a set of standards that are without conflict or unnecessary duplication in their requirements.

Responsibility of approving American standards rests with the
American National Standards Institute, Inc.
25 West 43rd Street, Fourth floor
New York, NY 10036

ASME/CSA Standard

ASME A17.8-2021/CSA B44.8:21 Standard for wind turbine tower elevators



®A trademark of the Canadian Standards Association and CSA America Inc., operating as "CSA Group"

*Published in December 2021 by CSA Group
A not-for-profit private sector organization
178 Rexdale Boulevard, Toronto, Ontario, Canada M9W 1R3
1-800-463-6727 • 416-747-4044*

Visit the CSA Group Online Store at www.csagroup.org/store/

*The American Society of Mechanical Engineers (ASME)
Two Park Avenue
New York, NY 10016-5990, USA
1-800-843-2763*

Visit the ASME Online Store at www.asme.org

Date of Issuance: January 28, 2022

Commitment for Amendments

This Standard is issued jointly by The American Society of Mechanical Engineers (ASME) and the Canadian Standards Association (operating as “CSA Group”). Amendments to this Standard will be made only after processing according to the Standards writing procedures of both ASME and CSA Group. The next edition of this Standard is scheduled for publication in 2026.

The American Society of Mechanical Engineers
(ASME)
Two Park Avenue
New York, NY 10016-5990 USA
www.asme.org

ISBN 978-0-7918-7439-4

© Copyright 2021

All rights reserved. No part of this publication may be reproduced in any form whatsoever without the prior permission of the publisher.

To purchase standards and related publications, visit ASME Online Store at www.asme.org.

This international code or standard was developed under the procedures accredited as meeting the criteria for American National Standards and it is an American National Standard. The Standards Committee that approved the code or standard was balanced to assure that individuals from competent and concerned interests have had an opportunity to participate. The proposed code or standard was made available for public review and comment that provides an opportunity for additional public input from industry, academia, regulatory agencies, and the public-at-large.

Errata to codes and standards may be posted on the ASME Web site under the Committee Pages to provide corrections to incorrectly published items, or to correct typographical or grammatical errors in codes and standards. Such errata shall be used on the date posted. The Committee Pages can be found at <http://cstools.asme.org/>. There is an option available to automatically receive an e-mail notification when errata are posted to a particular code or standard. This option can be found on the appropriate Committee Page after selecting “Errata” in the “Publication Information” section.

Published in December 2021 by CSA Group
A not-for-profit private sector organization
178 Rexdale Boulevard
Toronto, Ontario, Canada M9W 1P5
www.csagroup.org

ISBN 978-1-4883-3920-2

© 2021 CSA Group
ICS 53.020.51

All rights reserved. No part of this publication may be reproduced in any form whatsoever without the prior permission of the publisher.

To purchase standards and related publications, visit the CSA Group Online Store at www.csagroup.org/store/ or call toll-free 1-800-463-6727 or 416-747-4044.

Contents

ASME A17 Elevator and Escalator Standards Committee	6
CSA B44 Technical Committee on the Elevator Safety Code	8
ASME A17.8/CSA B44.8 Joint Committee on Wind Turbine Tower Elevators	13
Foreward	16
Preface	19
1 General	25
1.1 Scope	25
1.1.1 Effective date	25
1.2 Purpose and exceptions	25
1.2.1 Purpose	25
1.2.2 Exceptions to ASME A17.8/CSA B44.8	25
1.3 Definitions	25
1.4 References	33
2 Wind turbine tower elevators	35
2.1 Construction of hoistways	35
2.1.1 Hoistway enclosure not required	35
2.1.2 Enclosures required at landings	35
2.1.3 Floor over travel path not required	35
2.2 Pits	36
2.3 Location and enclosing of counterweights	36
2.3.1 Counterweight runways	36
2.3.2 Access to enclosed counterweights and ropes	36
2.4 Vertical clearances for cars and counterweights	36
2.4.1 Top car clearance (maintenance/inspection access required)	36
2.4.2 Top car clearance (maintenance/inspection access not required)	37
2.4.3 Top counterweight clearance	37
2.5 Horizontal car and counterweight clearances	37
2.5.1 Between car and landing platforms	37
2.5.2 Between car and any stationary object	37
2.5.3 Between car and counterweight and counterweight guard	37
2.5.4 Measurement of clearances	37
2.6 Protection of spaces below the travel path	37
2.7 Machinery spaces and control spaces	37
2.7.1 Equipment location	37
2.8 Equipment in the travel path, machinery space, and control spaces	38
2.9 Electrical equipment and wiring	38
2.9 Machinery and sheave beams, supports, and foundations	38
2.9.1 Securing of machinery beams and type of supports	38
2.9.2 Loads on overhead beams and supports	39

2.9.3	Allowable stresses and deflections for machinery and sheave beams, their supports, and any support members that transmit load to the turbine tower walls	39
2.10	Guarding of equipment and standard railing	39
2.10.1	Guarding of equipment	39
2.10.2	Standard railing	39
2.10.3	Landing platform protection	40
2.11	Protection of landing platform openings	40
2.11.1	Landing platform doors or gates	40
2.11.2	Door or gate closers	40
2.11.3	Horizontal platform inside enclosure	40
2.11.4	Platform lighting	40
2.11.5	Landing platform enclosures	40
2.12	Landing platform door and gate locking devices, electric contacts, and trapped key systems	41
2.12.1	Landing platform door and gate locking devices	41
2.12.2	Where required (for automatic call operation)	41
2.12.3	Listing/certification door locking devices and door or gate electric contacts and landing platform enclosure gate combination mechanical locks and electric contacts	41
2.12.4	General design requirements	42
2.12.5	Listing/certification door locking devices and door or gate electric contacts	43
2.13	Power operation of landing platform doors and car doors and gates	43
2.14	Car enclosures, car doors and gates, and car illumination	43
2.14.1	Car enclosure	43
2.14.2	Car height	43
2.14.3	Vision panels	44
2.14.4	Enclosure panels	44
2.14.5	Strength of car top	44
2.14.6	Top of car railing	44
2.14.7	Car illumination	44
2.14.8	Emergency lighting	44
2.14.9	Car emergency exit	45
2.14.10	Car doors and gates	45
2.14.11	Car door and gate electric contacts	45
2.14.12	Clear openings	46
2.14.13	Sectioning	46
2.14.14	Ventilation	46
2.15	Car frames and platforms	46
2.15.1	Car frames and floors	46
2.15.2	Use of fasteners	46
2.15.3	Number of compartments	46
2.15.4	Guiding means	46
2.15.5	Strength of guiding means	46
2.15.6	Car frame	47
2.15.7	Guiding members	47
2.15.8	Kickboard	47
2.15.9	Obstruction-detection devices	47
2.15.10	Warning devices	47
2.15.11	Ladder-guided platforms	48
2.16	Capacity and loading	48

2.16.1	Capacity and data plates	48
2.16.2	Information required on plates	48
2.16.3	Limitation of load, speed, and platform area	48
2.16.4	Overload detection means	48
2.16.5	Speed-limiting device	48
2.17	Car and counterweight safeties	48
2.17.1	Wire rope gripping safety	49
2.17.2	Rack-and-pinion safety	49
2.17.3	Safety marking plates	50
2.17.4	Opening of driving-machine motor and brake control circuits on safety application	50
2.17.5	Application of safety	50
2.18	Reserved for future use	50
2.19	Reserved for future use	50
2.20	Suspension means and their connections	50
2.20.1	Suspension means for counterweighted traction elevators	51
2.20.2	Suspension means for uncounterweighted traction elevators	51
2.20.4	Replacement of suspension means	53
2.21	Counterweights	53
2.21.1	Counterweight guides	53
2.21.2	Types of counterweight construction	53
2.22	Buffers, bumpers, and retardations	53
2.22.1	Bumpers	54
2.22.2	Spring buffers	54
2.22.3	Retardations	54
2.23	Car and counterweight guidance systems, supports, and fastenings	54
2.23.1	Wire rope guidance system for uncounterweighted traction drive machines	54
2.23.2	Ladder guidance systems	56
2.24	Driving machines, sheaves, and brakes	57
2.24.1	Rack-and-pinion driving machines	57
2.24.2	Traction driving machines, sheaves and brakes	58
2.24.3	Material and grooving for sheaves	59
2.24.4	Factor of safety for driving machines and sheaves	59
2.24.5	Bolts transmitting torque and set screws	59
2.24.6	Friction-gearing or clutch mechanism	59
2.24.7	Use of cast iron in gears	59
2.24.8	Braking system on driving machines	59
2.24.9	Means for manual release of driving machine brake	60
2.25	Terminal stopping devices	60
2.25.1	Final terminal stopping	60
2.25.2	Normal terminal stopping	61
2.25.3	Slack rope detection	62
2.26	Operating devices and control equipment	62
2.26.1	Operation and operating devices	62
2.26.2	Electrical protective devices	62
2.26.3	Contactors and relays for use in critical operating circuits	63
2.26.4	Electrical equipment and wiring	63
2.26.5	Phase protection of motors	64
2.26.6	Installation of capacitors or other devices to make electrical protective devices ineffective	64
2.26.7	Control and operating circuits	64

2.26.8	Release and application of driving-machine brakes	65
2.27	Emergency operation and signaling devices	66
2.28	Layout drawings	66
2.29	Welding	66
2.29.1	Qualification of welders	66
2.29.2	Welding steel	66
2.29.3	Welding metals other than steel	66
2.30	Engineering tests, type tests, and certification requirements	67
2.30.1	General requirements for tests and certifications	67
2.30.2	Type tests of interlocks, combination mechanical locks and electric contacts, and door or gate electric contacts	68
2.30.3	General requirements	69
2.30.4	Required tests and procedure	69
2.31	Code data plate	71
2.31.1	Required information	71
2.31.2	Location	71
2.31.3	Material and construction	71

3 Maintenance, repair, replacement, testing, and alterations 72

3.1	Maintenance	72
3.1.1	General maintenance requirements	72
3.1.2	Maintenance personnel	73
3.1.3	Maintenance records	73
3.1.4	Code data plate	74
3.1.5	General maintenance methods and procedures	74
3.1.6	Periodic tests	75
3.2	General repair requirements	76
3.2.1	Applicable codes	76
3.2.2	Welding and design	76
3.2.3	Repair of suspension, guide, and safety ropes	76
3.2.4	Repair of safety	76
3.3	General replacement requirements	76
3.3.1	Replacement parts	76
3.3.2	Replacement suspension, guide, and safety rope	76
3.3.3	Replacement of car or counterweight safety	77
3.3.4	Replacement of driving machine	77
3.3.5	Replacement of controller	77
3.3.6	Listed/certified devices	77
3.4	Maintenance and testing of wind turbine tower elevators	77
3.4.1	Suspension means	77
3.4.2	Wire rope gripping safeties	78
3.4.3	Brakes	78
3.4.4	Car and counterweight safeties	78
3.4.5	Tests without load via alternative test methodologies	79
3.5	Alterations	80
3.5.1	Applicability of alteration requirements	80
3.5.2	Items not covered in 3.5	80
3.5.3	Testing	80
3.5.4	Welding	80

3.5.5	Design	80
3.5.6	Temporary wiring	80
3.5.7	Repairs and replacements	80
3.5.8	Code data plate	80
3.5.9	Location and guarding of counterweights	80
3.5.10	Vertical car and counterweights clearances and runbys	80
3.5.11	Horizontal car and counterweight clearances	80
3.5.12	Machinery spaces, and control spaces	80
3.5.13	Machinery and shave beams, and supports	81
3.5.14	Platform door locking devices	81
3.5.15	Car enclosures, car doors and gates, and car illumination	81
3.5.16	Car frames and platforms	81
3.5.17	Change in rated speed	81
3.5.18	Driving machines and sheaves	82
3.5.19	Controllers	82
3.5.20	Car and counterweight safeties	82
3.6	Acceptance inspections and tests	82
3.6.1	General requirements for acceptance inspections and tests	83
3.6.2	Acceptance inspections and tests	84
3.6.3	Inspection and test requirements for altered installations	87
3.7	Periodic inspections and witnessing of tests	87
3.7.1	General requirements for periodic inspections and witnessing of tests	87
3.7.2	Periodic inspection requirements	89
3.7.3	Periodic test requirements — Category 1	91
3.7.4	Periodic test requirements — Category 5	91
3.7.5	Category 5 tests without load via alternative test methodologies	92

Annex A (informative)	— Wind turbine tower elevator clearances	94
Annex B (informative)	— Maintenance control program records	95
Annex C (informative)	— Acceptance tests	97

(ED) ***ASME A17 Elevator and Escalator
Standards Committee***

H.E. Peelle III, *Chair*

R. E. Baxter, *Vice-Chair*

M. H. Tevyaw, *Vice-Chair*

G.A. Burdeshaw, *Secretary*

E.V. Baker, IUEC

M.D. Morand, *Alternate*, Qualified Elevator Inspector Training Fund (QEITF)

R.E. Baxter, Baxter Residential Elevators, LLC

P. R. Bothwell, EHC Global Inc.

K.L. Brinkman, National Elevator Industry, Inc.

R. C. Burch, VANTAGE / GAL Manufacturing Company, LLC

G.A. Burdeshaw, American Society of Mechanical Engineers (ASME)

J.W. Coaker, Coaker & Co., PC

J. Filippone, Vertical Transportation Consultant

R. Gregory, Vertex Corp.

P. Rosenberg, *Alternate*, Performance Elevator Consulting, LLC

P. Hampton, Thyssenkrupp Elevator US Manufacturing Headquarters

J. D. Henderson, *Alternate*, Thyssenkrupp Elevator US Manufacturing Headquarters

J.T. Herrity, Department of the Navy, Naval Facilities Command (NAVFAC)

D.A. Kalgren, KONE Inc.

D.S. Boucher, *Alternate*, KONE Inc.

J. Koshak, Elevator Safety Solutions, LLC

H. Simpkins, *Alternate*, Thyssenkrupp Elevator

R. Kremer, Technical Standards & Safety Authority

D. McColl, Otis Canada Inc.

D. McLellan, Technical Standards & Safety Authority

A. L. Peck, VDA Consultants

H. M. Vyas, *Alternate*, vda® Thevda- Leader in Delivering Vertical Transportation Consulting

H.E. Peelle III, The Peelle Company Ltd.

S.P. Reynolds, *Alternate*, The Peelle Company Ltd.

D. Prince, Motion Control Engineering

J. Rearick, Rearick & Company Inc.

V. Robibero, RobiberoV Consultancy LLC

J. W. Blain, *Alternate*, Edgett Williams Consulting Group

R. Seymour, Robert L. Seymour & Associates, Inc.

R. D. Shepherd, Retired

J. Day, *Alternate*, NAESA International

W. M. Snyder, VTE Solution, LLC

M. H. Tevyaw, MHT Codes & Consulting

D. L. Turner, Davis L Turner & Assoc., LLC

M. Farinola, *Alternate*, MV Farinola Inc.

J. Xue, *Delegate*, Shanghai Institute of Special Equipment Inspection and Technical Research

(ED) ***CSA B44 Technical Committee on the Elevator Safety Code***

D. McColl	Otis Canada Inc., Mississauga, Ontario, Canada <i>Category: Producer Interest</i>	<i>Chair</i>
C. M. Ayling	PCL Constructors Canada Inc., Mississauga, Ontario, Canada <i>Category: User/General Interest</i>	
T. Baik	Toronto Transit Commission, Toronto, Ontario, Canada	<i>Non-voting</i>
L. Bialy	Louis Bialy and Associates LLC, San Rafael, California, USA	<i>Non-voting</i>
S. Bornstein	KONE Elevators, Mississauga, Ontario, Canada <i>Category: Producer Interest</i>	
M. Brierley	Coldwater, Ontario, Canada	<i>Non-voting</i>
K. L. Brinkman	National Elevator Industry, Inc., Eureka, Illinois, USA	<i>Non-voting</i>
D. Bruce	Alberta Municipal Affairs, Edmonton, Alberta, Canada <i>Category: Regulatory Authority</i>	
E. Chayer	STM, Montréal, Québec, Canada <i>Category: User/General Interest</i>	
K. C. Cheong	MKC Engineering Corp, Vancouver, British Columbia, Canada <i>Category: User/General Interest</i>	
C. Cowen	Tyssenkrupp Elevator (Canada) Limited, Toronto, Ontario, Canada <i>Category: Producer Interest</i>	

K. Duncan	Inspection and Technical Services, Winnipeg, Manitoba, Canada <i>Category: Regulatory Authority</i>	
T. Evans	Underwriters Laboratories Inc., Toronto, Ontario, Canada	<i>Non-voting</i>
P. Fraser	Government of Newfoundland & Labrador/ Service NL, Mount Pearl, Newfoundland and Labrador, Canada <i>Category: Regulatory Authority</i>	
A. Ghazanchari	Otis Canada, Inc., Mississauga, Ontario, Canada	<i>Non-voting</i>
G. W. Gibson	George W. Gibson & Associates Inc., Sedona, Arizona, USA	<i>Non-voting</i>
S. Gurumurthy	KONE Inc., Canada, Mississauga, Ontario, Canada	<i>Non-voting</i>
A. S. Hopkirk	Trident Elevator Company Limited, Scarborough, Ontario, Canada <i>Category: User/General Interest</i>	
R. Isabelle	KJA Consultants Inc., Toronto, Ontario, Canada <i>Category: User/General Interest</i>	
F. Kassem	ThyssenKrupp Elevator Canada, Montréal, Québec, Canada	<i>Non-voting</i>
J. W. Koshak	Elevator Safety Solutions, LLC, Collierville, Tennessee, USA	<i>Non-voting</i>
R. Kremer	Technical Standards & Safety Authority, Toronto, Ontario, Canada	<i>Non-voting</i>
D. Laguerre	Schindler Elevator Corporation, Toronto, Ontario, Canada <i>Category: Producer Interest</i>	
D. Lenardis	Public Service Procurement Canada, Ottawa, Ontario, Canada	<i>Non-voting</i>

S. MacArthur	OTIS, Ottawa, Ontario, Canada	<i>Non-voting</i>
S. E. MacArthur	Department of Community and Cultural Affairs and Labour, Charlottetown, Prince Edward Island, Canada <i>Category: Regulatory Authority</i>	
R. Marsiglio	H. H. Angus & Associates Ltd, Toronto, Ontario, Canada <i>Category: User/General Interest</i>	
P. McClare	Dept of Labour and Advanced Education, Dartmouth, Nova Scotia, Canada <i>Category: Regulatory Authority</i>	
E. McClaskey	International Union of Elevator Constructors, Pleasant Hill, California, USA <i>Category: User/General Interest</i>	
K. L. McGettigan	Elevator Industry Work Preservation Fund, Effingham, New Hampshire, USA <i>Category: User/General Interest</i>	
A. McGregor	Rooney, Irving & Associates Ltd., Ottawa, Ontario, Canada	<i>Non-voting</i>
C. McIntyre	Canadian Elevator Industry Educational Program, Pickering, Ontario, Canada	<i>Non-voting</i>
D. McLellan	Technical Standards & Safety Authority (TSSA), Toronto, Ontario, Canada <i>Category: Regulatory Authority</i>	
M. Mihai	Technical Standards & Safety Authority (TSSA), Toronto, Ontario, Canada	<i>Non-voting</i>
T. Miller	Priestman Neilson & Associates Ltd, Ottawa, Ontario, Canada <i>Category: User/General Interest</i>	
R. Murphy	Garaventa Canada Ltd, Surrey, British Columbia, Canada <i>Category: Producer Interest</i>	

S. Palko	Regina, Saskatchewan, Canada	<i>Non-voting</i>
M. Pedram	Modern Elevator Innovations Inc., Hamilton, Ontario, Canada <i>Category: Producer Interest</i>	
H. Peelle	The Peelle Company Limited, Brampton, Ontario, Canada <i>Category: Producer Interest</i>	
B. Potvin	National Research Council - Codes Canada, Ottawa, Ontario, Canada <i>Category: User/General Interest</i>	
A. Rehman	Schindler Elevator Corporation, Morristown, New Jersey, USA	<i>Non-voting</i>
A. Reistetter	National Elevator & Escalator Association, Mississauga, Ontario, Canada	<i>Non-voting</i>
S. Reynolds	The Peelle Company Limited, Brampton, Ontario, Canada	<i>Non-voting</i>
E. Ryba	Public Services and Procurement Canada, Ottawa, Ontario, Canada <i>Category: User/General Interest</i>	
R. Santos	Technical Safety Authority of Saskatchewan (TSASK), Regina, Saskatchewan, Canada <i>Category: Regulatory Authority</i>	
R. Scharfe	Pembroke, Ontario, Canada	<i>Non-voting</i>
P. Sorensen	Technical Safety BC, Vancouver, British Columbia, Canada	<i>Non-voting</i>
K. Steeves	Province of New Brunswick Department of Public Safety, Moncton, New Brunswick, Canada <i>Category: Regulatory Authority</i>	
M. Tevyaw	MHT Codes & Consulting Specialists, Burlington, Ontario, Canada	<i>Non-voting</i>

T. Thomas	Government of the Northwest Territories, Yellowknife, NWT, Canada <i>Category: Regulatory Authority</i>	
E. Towson	Technical Safety BC, West Kelowna, British Columbia, Canada <i>Category: Regulatory Authority</i>	
K. Virk	UT Elevator Inc., Toronto, Ontario, Canada	<i>Non-voting</i>
J. Virk	Unitech Elevator Company, Pickering, Ontario, Canada	<i>Non-voting</i>
B. Virk	UT Elevator, Toronto, Ontario, Canada <i>Category: Producer Interest</i>	
L. Yang	CSA Group, Toronto, Ontario, Canada	<i>Non-voting</i>
M. Zingarelli	MAD-Elevator Inc., Mississauga, Ontario, Canada	<i>Non-voting</i>
J. Menard	CSA Group, Toronto, Ontario, Canada	<i>Project Manager</i>

(ED) ***ASME A17.8/CSA B44.8 Joint Committee on
Wind Turbine Tower Elevators***

R. S. Hultstrom	Industry Work Preservation Fund, Columbia, Maryland, USA	<i>Chair</i>
J. Koshak	Elevator Safety Solutions, LLC, Germantown, Tennessee, USA	<i>Vice-Chair</i>
R. Mohamed	American Society of Mechanical Engineers (ASME), New York, New York, USA	<i>Secretary</i>
C. Barrett	Elevator Industry Work Preservation Fund, Kent, Washington, USA	
J.L. Borwey	NAESA International, Mankato, Minnesota, USA	
G. Brickell	Brickell Technology, Auckland, New Zealand	<i>Contributing Member</i>
C.E. Cuenin	Cuenin Elevator Corporation, Grand Ridge, Florida, USA	<i>Alternate</i>
T. Daqoune	ENERCON Canada Inc., Montreal, Quebec, Canada	
K. Govaert	Sky Man International NV, Boom, Belgium	<i>Contributing Member</i>
P.S. Grewal	Hailo LLC, Elberton, Georgia, USA	<i>Contributing Member</i>
R.J. Gromek	Bechtel National Inc., Richland, Washington, USA	<i>Contributing Member</i>
P. Gulletson	CSA Group, Toronto, Ontario, Canada	
J.J. Haigh	SafeWorks, LLC, Menomonee Falls, Wisconsin, USA	

J.T. Herrity	Department of the Navy, Naval Facilities Command (NAVFAC), Fleming Island, Florida, USA	<i>Contributing Member</i>
G. G. Johnston	Universal Builders Supply, Montross, Virginia, USA	
R. Kaspersma	KONE Den Haag, The Hague, Netherlands	<i>Contributing Member</i>
K. Matharu	Tractel, Scarborough, Ontario, Canada	<i>Contributing Member</i>
G. S. McDonald	Safeworks, Tukwila, Washington, USA	<i>Alternate</i>
L. Metzinger	Avanti Wind Systems Inc., Franklin, Wisconsin, USA	
J. Rearick	Rearick & Company Inc., Houston, Texas, USA	
P.D. Smith	Tempest Group, Grand Ridge, Florida, USA	
S. Strawn	Elevator Safety and Technical Services, Tallahassee, Florida, USA	
S. Swett	SwettCorp, Houston, Texas, USA	
D. Swett	Swett & Associates, Houston, Texas, USA	<i>Alternate</i>
G. VanderPloeg	Select Elevator Solutions Inc., London, Ontario, Canada	
S.W. Weaver	Consultant, Amarillo, Texas, USA	<i>Contributing Member</i>

L. Yang CSA Group,
Toronto, Ontario, Canada

J. Menard CSA Group, *Project Manager*
Toronto, Ontario, Canada

(ED) **Foreword**

Equipment covered by this standard was originally codified and incorporated into ASME A17.1-2013/CSA B44-13, Section 5.11, in October 2013. The first edition of this Standard was published in November 2016 and prepared by The American Society of Mechanical Engineers (ASME), Wind Turbine Tower Elevator Committee with the assistance of representatives of a number of interests including manufacturers, certifying organizations, regulatory bodies, and technical consultants from North America and Europe.

The work to develop this Standard originated when the A17 Standards Committee was presented information on the numbers of these elevators already installed and the estimate of projected number of elevators to be constructed in North America.

The A17 Standards Committee voted that these elevators were under the Scope of ASME A17.1/CSA B44, Safety Code for Elevators and Escalators and in January 2009, assigned the project of developing language to the Special Purpose Personnel Elevator (SPPE) Committee. The SPPE Committee created a Project Team consisting of A17/B44 representatives, technical advisors from the American Wind Energy Association (AWEA), specialists in the design of these types of elevators, manufacturers from Denmark, Belgium, Spain, and Canada, and two members from Accredited Elevator/Escalator Certifying Organizations (AECOs) from the Netherlands and the United States.

The first Project Team meeting was held in March 2009. A number of meetings of the Team were held during the next three years, using the Special Purpose Personnel Elevator language, Section 5.7, as a basis for developing Wind Turbine Elevator Code language. The Team performed hazard assessment to establish equivalent levels of safety considering the very unique environment these elevators are installed where current ASME A17.1/CSA B44 codes do not address specific circumstances and structural requirements. In 2012, the Project Team was converted to a full Working Committee of A17, and the ASME A17.1/CSA B44, Section 5.11 was completed, approved by ANSI, and published as an American National Standard, ASME A17.1-2013/CSA B44-13. In 2013, the A17 Standards Committee approved the conversion of Section 5.11 into ASME A17.8/CSA B44.8 to provide a global code to international manufacturers in an effort to harmonize worldwide construction, installation, operation, testing, inspection, maintenance, alteration, and repair requirements.

ASME A17.8-2016/CSA B44.8-16 was approved as an American National Standard by the American National Standards Institute (ANSI) on January 8, 2016.

The second edition of ASME A17.8-2021/CSA B44.8:21 includes revisions listed in the summary of changes section. This edition adds requirements for engineering tests, type tests, and certifications; maintenance, repair, replacements, testing, and alterations; as well as suspension means and their connections. These additions were to create a document not dependent on ASME A17.1/CSA B44, but separate their unique requirements into a separate standard. This 2021 edition is also being changed from periodic maintenance to a five-year cycle continuous maintenance publication. This Standard was approved as an American National Standard by the American National Standards Institute (ANSI) on October 27, 2021.