

ASME QEI-1–2007
(Revision of ASME QEI-1–2004)

Standard for the Qualification of Elevator Inspectors

AN AMERICAN NATIONAL STANDARD



**The American Society of
Mechanical Engineers**

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FOREWORD

Participants from the National Association of Elevator Safety Authorities, the National Elevator Industries, Inc., the American Insurance Association, and the Alliance of American Insurers met in early 1981 to discuss the trend among state and municipal governments to rely on private inspection agencies and self-inspection by elevator companies to perform inspections that had traditionally been done by the jurisdictional authorities. One of the prime concerns of the group was to develop a means for ensuring that the quality of the inspections remained at a high level. The group determined that addressing the qualifications of the persons performing the inspections is an important part of achieving this goal.

The American Society of Mechanical Engineers (ASME), which had been actively involved in elevator safety through the sponsorship of the A17 Elevator and Escalator Committee, was asked to participate in the group's discussions. ASME expressed an interest in this project and established an ad hoc committee consisting of members of the above organizations to develop a scope and guidelines for the establishment of a standards-writing committee.

On November 12, 1981, the ASME Council on Codes and Standards responded to this request and approved the formation of the ASME Committee on the Qualification of Elevator Inspectors (QEI Committee) to develop an American National Standard.

The goal established for the QEI Committee is to provide for the public health, safety, and welfare by supplementing existing standards in this field. ASME A17.1, Safety Code for Elevators and Escalators, covers design, construction, operation, inspection, testing, maintenance, alteration, and repair. ASME A17.2, Guide for Inspection of Elevators, Escalators, and Moving Walks, supplements the Safety Code by providing guidelines for the inspection and testing of the equipment. Neither A17.1 nor A17.2, however, covers the qualifications of inspection personnel, and the duties of the inspector are only covered briefly in the Introduction to the Inspectors' Manual.

The excellent safety record of elevators, escalators, and related equipment has been maintained, in part, by quality field inspections and tests. However, advancing technology and safety requirements have highlighted the need for establishing uniform criteria for the persons performing these inspections. The quality of inspections, of course, depends on the competence of the inspector, and the Standard for the Qualification of Elevator Inspectors is dedicated to that purpose.

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.

With the harmonization of ASME A17.1 and CSA B44, the application of the QEI Standard is now widespread in Canada. To enable the effective use of the QEI Standard by the jurisdictions in Canada enforcing codes other than those published by ASME, the QEI Standard was revised in the 2007 edition to include reference to equivalent Canadian codes. The reference to any Canadian standard and access to or possession of those standards is necessary only in Canada or where the standards are adopted or enforced.

This revision of QEI-1 was approved by the American National Standards Institute on December 21, 2007.



ASME COMMITTEE ON THE QUALIFICATION OF ELEVATOR INSPECTORS

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

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PREFACE

PURPOSE

This Standard is intended for the purpose of establishing uniform criteria, which will aid in

(a) qualifying and training of inspection personnel for government agencies, insurance companies, elevator companies, building owners, and managers

(b) the accreditation of inspection agencies

It is also intended to serve as a guideline on which certification is based by detailing the expertise necessary in performing inspections.

It is recommended that state, municipal, and other jurisdictional authorities reference this Standard in their governing regulations covering subjects included in this Standard. Model language for enforcement authorities to recognize certified inspectors and inspection supervisors from accredited organizations is shown in Nonmandatory Appendix D.

ACCREDITATION

The American Society of Mechanical Engineers has established procedures to authorize organizations to certify that persons have met the requirements of this Standard (see Part 4). ASME does not “approve,” “certify,” “rate,” or “endorse” any person certified by an organization holding a Certificate of Accreditation, and there shall be no statement or implication that might so indicate.

FORM AND ARRANGEMENT

The Foreword, Preface, and Appendices are included in this Standard for information only. They have been approved by the QEI Committee. The requirements therein are nonmandatory.

RELATED PUBLICATIONS

This Standard is one of the numerous codes and standards that have been developed and published by The American Society of Mechanical Engineers. These and publications of other organizations, all of which may be of special interest to users of this Standard, are listed in Nonmandatory Appendix A.

CORRESPONDENCE WITH THE QEI COMMITTEE

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

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

Proposing Revisions. Revisions made to this Standard will incorporate changes that appear necessary or desirable as demonstrated by the experience gained from its application, and in order to conform to developments in the elevator field. Approved revisions will be published in the next edition.

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

Requesting Interpretations. ASME issues written replies to inquiries concerning interpretation of technical aspects of this Standard. Interpretations are published on the ASME Web site under the Committee Pages at <http://cstools.asme.org/>. Interpretations can only be rendered in response to a written request sent to the Secretary of the QEI Standards Committee.

ASME procedures provide for reconsideration of any interpretation when or if additional information that might affect the 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 person, company, organization, item, construction, proprietary device, or activity.

Attending Committee Meetings. The QEI Standards Committee regularly holds meetings that are open to the public. All portions of meetings that concern evaluation of certifying organizations are closed to the public. Persons wishing to attend any meeting should contact the Secretary of the QEI Standards Committee.



ASME QEI-1–2007 SUMMARY OF CHANGES

Following approval by the ASME QEI Committee and ASME, and after public review, ASME QEI-1–2007 was approved by the American National Standards Institute on December 21, 2007.

ASME QEI-1–2007 includes editorial changes, revisions, and corrections introduced in ASME QEI-1–2004 as well as the following changes identified by a margin note, (07).

<i>Page</i>	<i>Location</i>	<i>Change</i>
1–3	1-1.1	References to ASME A17.1 updated and CSA B355 added
	1-1.3	Reference to ASME A17.1 updated
	1-1.4	Reference to ASME A17.1 updated and CSA B355 added
	1-1.5	Reference to ASME A17.1 updated and CSA B355 added
	1-2	(1) First paragraph revised (2) Definitions of <i>CEU</i> and <i>continuing educational credit</i> added (3) Definitions of <i>inspector</i> and <i>latest edition</i> revised
	1-3	Subparagraphs (a), (c), (d), and (h) revised
	1-4	(1) Subparagraphs (a), (h), and (i) revised (2) Subparagraph (l) added
	1-5	(1) Subparagraphs (a)(1), (a)(3), (a)(5), and (b)(1) revised (2) Subparagraphs (b)(2)(e) and (b)(4) added
4–6	2-1	(1) In the first paragraph, references to ASME A17.1 updated and CSA B355 added (2) In subpara. (b)(1), references to ASME A17.1 updated and CSA B355 added (4) Subparagraphs (h), (j), (m), and (n) revised (5) In subpara. (o), reference to CSA B355 added (6) Subparagraph (p) revised
	2-2(c)(1)	Reference to ASME A17.1 updated and CSA B355 added
	2-3	Revised in its entirety
7, 8	3-3	Revised in its entirety
10, 11	4-2.11	Revised in its entirety
13	A-1	Reference to ASME A17.1 updated



<i>Page</i>	<i>Location</i>	<i>Change</i>
	A-2	Revised
	A-3	First paragraph revised and subpara. (d) added
	A-5	Revised
	A-7	Revised
14	A-8(a)	Revised
18	Nonmandatory Appendix E	Added
19, 20	Nonmandatory Appendix F	Added
21–23	Nonmandatory Appendix G	Added

SPECIAL NOTE:

The interpretations to QEI-1 are included in this edition as a separate section for the user's convenience.



STANDARD FOR THE QUALIFICATION OF ELEVATOR INSPECTORS

Part 1 Introduction

1-1 SCOPE

(07) 1-1.1 Inspectors and Inspection Supervisors

This Standard includes requirements for the qualification, duties, and responsibilities of inspectors and inspection supervisors engaged in the inspection and testing of

(a) hoisting and lowering mechanisms, equipped with a car or platform, that move between two or more landings. This equipment includes, but is not limited to, the following:

(1) elevators (ASME A17.1/CSA B44)

(2) platform and stairway chairlifts (ASME A18.1 or CSA B355)

(b) power-driven stairways and walkways for carrying persons between landings. This equipment includes, but is not limited to, the following:

(1) escalators (ASME A17.1/CSA B44)

(2) moving walks (ASME A17.1/CSA B44)

(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, the following:

(1) dumbwaiters (ASME A17.1/CSA B44)

(2) material lifts and dumbwaiters with automatic transfer devices (ASME A17.1/CSA B44)

NOTE: Nonmandatory Appendix B also includes recommended qualifications and duties of inspector trainees.

1-1.2 Accreditation

This Standard includes requirements for accreditation of organizations that certify inspectors and inspection supervisors.

(07) 1-1.3 Certification

ASME A17.1/CSA B44, requirements 8.10.1.1 and 8.11.1.1 require inspectors and inspection supervisors to be certified by an organization accredited by ASME in accordance with the requirements contained in this Standard.

1-1.4 Covered Inspections

(07)

This Standard applies to any person who is making an inspection to determine compliance with the requirements of ASME A17.1/CSA B44, ASME A17.3, CSA-B44.1/ASME A17.5, and ASME A18.1 or CSA B355. It applies to persons typically employed by, but is not limited to, the following:

(a) jurisdictional authorities.

(b) independent inspection agencies and elevator consultants.

(c) insurers of the equipment.

(d) manufacturers, installers, and maintainers of the equipment.

(e) building owners and managers.

(f) testing laboratories performing field inspections and tests. See also para. 1-1.5.

1-1.5 Exempt Inspections

(07)

This Standard does not cover personnel engaged in engineering and type testing as covered in Section 8.3 of ASME A17.1/CSA B44, Section 8 of ASME A18.1 or Appendix A of CSA B355, and CSA-B44.1/ASME A17.5, including inspection by laboratories in association with these tests.

1-2 DEFINITIONS

(07)

Terms used in this Standard shall have the meanings specified in the following definitions. Other terms used shall have the meanings specified in Section 1.3 of ASME A17.1/CSA B44.

accredited certifying organization: a certifying organization that holds a valid Certificate of Accreditation.

ASME: The American Society of Mechanical Engineers.

Certificate of Accreditation: a certificate issued by ASME to a certifying organization that verifies the adequacy of the organization to meet the requirements of Part 4 of this Standard.

certification manual: the documentation of a certification program.

