

**ASME A17.3-2011**  
(Revision of ASME A17.3-2008)

# **Safety Code for Existing Elevators and Escalators**

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

**AN AMERICAN NATIONAL STANDARD**



**The American Society of  
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## 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 when next renewal of cables or other parts affected is made.

(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 A17.1–1981:

“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 that appear for the first time in this edition.

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 the Summary of Changes. Part VII, Hand Elevator and Part VIII, Sidewalk Elevator, appear for the first time in this 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 the Summary of Changes. Part X, Private Residence Elevators, and Nonmandatory Appendix D appear for the first time in this edition.

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

This sixth edition of the Code incorporates the changes made in A17.3–2002 as well as the revisions shown in the Summary of Changes.

The seventh edition of the Code incorporates the changes made in A17.3–2005 as well as the revisions shown in the Summary of Changes.

The eighth edition of the Code incorporates the changes made in A17.3–2008 as well as 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 editions and addenda:

Editions and Addenda		Approved	Issued	Effective
First Edition	ASME/ANSI A17.3–1986	February 12, 1986	May 30, 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



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(January 2011)

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# PREFACE

## 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.

The purpose of this Code is to establish minimum requirements that will provide a reasonable degree of safety for the general public. While many of these requirements will also increase the degree of safety for the elevator mechanic and inspector, this area has not been specifically addressed at this time.

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 E 380, 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

