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LOCATING CODES AND STANDARDS

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Locating codes and standards can be frustrating and time consuming. However, in recent years it has become increasing easier to locate and purchase documents using the internet. Web addresses are given for all the sources of information in this article. Most codes and standards are now available electronically (CD ROM or on the Web) and in a printed format. Purchasers should inquire as to the formats available when ordering. Mandatory codes and standards can usually be obtained from the authority having jurisdiction (AHJ) or they can provide you with procurement information.

A comprehensive code database, CodeFinder, is now available to *NEII*® Regular Members and *NEII*® Individual Members of the codes, standards, and regulations that affect the building transportation industry. CodeFinder contains electrical, accessibility, building, new, performance and existing elevator, and life safety codes, standards and regulations. One of the best features of CodeFinder is the fact that users are able to see any modifications that are made to the model codes by the local jurisdiction. Included in the database are all of the jurisdictional codes in the United States and Canada, as well as contact information for the enforcing authorities and a complete list of the codes they use.

NEII® CodeFinder
www.neii.org/

UNITED STATES CODES AND STANDARDS

Consensus codes are generally written as mandatory while standards written as recommendations. Neither is enforceable unless adopted by an AHJ. In the United States building transportation industry, the most widely used code and standards documents are the Safety Codes for Elevators and Escalators, ASME A17.1/CSA B44; Performance-Based Safety Code for Elevators and Escalators, ASME A17.7/CSA B44.7; Guide for the Inspection of Elevators, Escalators and Moving Walks, ASME A17.2; Safety Code for Existing Elevators and Escalators, ASME A17.3; Standard for Elevator and Escalator Electrical Equipment, CSA-

B44.1/ASME A17.5; Standard for Elevator Suspension, Compensation, and Governor Systems, ASME A17.6; Guide for Emergency Personnel, ASME A17.4; Standard for the Qualifications of Elevator Personnel, ASME QEI - 1; and Safety Standard for Platform Lifts and Stairway Chairlifts, ASME A18.1. Additionally, ASME publishes the ASME A17.1/CSA B44 Handbook by Edward A. Donoghue, CPCA, which clarifies and explains code requirements.

The ASME A17.1 and CSA B44 Codes were harmonized in 2007 and published as the Safety Codes for Elevators and Escalators, ASME A17.1/CSA B44. The latest edition of ASME A17.1/CSA B44 is the 2010 edition. The harmonized United States and Canadian Performance Based Safety Codes for Elevators and Escalators, ASME A17.7/CSA B44.7 was published in 2007. All of these documents can be obtained from:

American Society of Mechanical Engineers (ASME)
Order Department
22 Law Drive/Box 2300
Fairfield, NJ 07007-2300
800-THE-ASME
201-882-1167)
www.asme.org/

ASME documents are also available from Elevator World, whose address is listed later in this article.

The ASME A17.1/CSA B44 and ASME A17.7/CSA B44.7 codes contain many references to other codes and standards. To help the users of the ASME A17.1/CSA B44 Codes, procurement information for referenced codes and standards, is contained in Part 9 of that document. Procurement information for referenced codes and standards in ASME A17.7/CSA B44.7 can be found in Part 5 of that document. Those documents identify 90% of the codes and standards, which will normally be encountered by the North American building transportation industry. Additional codes and standards reference material and ordering information can also be found in Part 9 of the ASME A17.1/CSA B44 Handbook.

How to locate the remaining 10%? Among the best-known organization is the American National Standards Institute (ANSI). Documents are usually identified as an American National Standard or with the ANSI initials or logo.

Request for electronic delivery of standards – either individual sale via ANSI's Electronic Standards Store or site license access via networking agreements should be directed to:

American National Standards Institute (ANSI)
11 West 42nd Street, 13th Floor
New York, NY 10036
212-354-3300
www.ansi.org/

Request for printed copies of standards – should be directed to:

IHS Standards Store
15 Inverness Way East
Englewood, CO 80112-2776
800-854-7179
<http://global.ihs.com/>

Other major standard writing organizations, in addition to those already mentioned, are:

American Society for Testing and Material (ASTM)
100 Barr Harbor Drive
West Conshohocken, PA 19428-2959
610-832-9585
www.astm.org/

National Fire Protection Association (NFPA)
Batterymarch Park
Quincy, MA 02269
800-344-3555
617-770-3000
www.nfpa.org/

Underwriters Laboratories Inc. (UL)
333 Pfingsten Road
Northbrook, IL 60062
847-272-8800
www.ul.com/

UL documents are available for purchase from:




comm 2000
151 Eastern Avenue
Bensenville, IL 60106
888-853-3512
www.comm-2000.com/

ADA Standards

The ADA applies to facilities in the private sector (places of public accommodation and commercial facilities) and to state and local government facilities. Standards issued by the DOJ apply to all ADA facilities except transportation facilities, which are subject to standards maintained by the DOT. On September 15, 2010, DOJ published in the Federal Register updated ADA regulations and adopted its 2010 ADA Standards for Accessible Design that will take effect in March 2012, although immediate use is permitted. It concurrently published a separate Guidance on the 2010 ADA Standards for Accessible Design that explains the rationale for many

of the regulations. DOT adopted updated its ADA standards in 2006 which apply to bus stops, rail stations, airports, and other transportation facilities.





ADA Standards

Facility	Standards to Follow									
 <p>Places of Public Accommodation and Commercial Facilities (private sector)</p>	<p>Compliance Dates for New Construction and Alterations</p> <table border="1"> <tr> <td>On or after January 26, 1993 and before September 15, 2010</td> <td>1991 Standards</td> </tr> <tr> <td>On or after September 15, 2010 and before March 15, 2012</td> <td>1991 Standards or 2010 Standards</td> </tr> <tr> <td>On or after March 15, 2012</td> <td>2010 Standards</td> </tr> </table>	On or after January 26, 1993 and before September 15, 2010	1991 Standards	On or after September 15, 2010 and before March 15, 2012	1991 Standards or 2010 Standards	On or after March 15, 2012	2010 Standards	<p>Applicable Standards</p>		
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On or after March 15, 2012	2010 Standards									
 <p>State and Local Government Facilities (except transportation facilities)</p>	<p><i>DOJ's title II regulation (28 CFR Part 35) allows use of the original ADA standards (with some exceptions) or the Uniform Federal Accessibility Standards (UFAS). DOJ's updated title II regulation implements the 2010 standards which will become mandatory March 15, 2012 and replace the option to use the original ADA standards or UFAS. Before that date, the 2010 standards can be used in lieu of the original ADA standards or UFAS.</i></p> <table border="1"> <thead> <tr> <th style="text-align: center;">Compliance Dates for New Construction and Alterations</th> <th style="text-align: center;">Applicable Standards</th> </tr> </thead> <tbody> <tr> <td>Before September 15, 2010</td> <td>1991 Standards or UFAS</td> </tr> <tr> <td>On or after September 15, 2010 and before March 15, 2012</td> <td>1991 Standards, UFAS, or 2010 Standards</td> </tr> <tr> <td>On or after March 15, 2012</td> <td>2010 Standards</td> </tr> </tbody> </table>		Compliance Dates for New Construction and Alterations	Applicable Standards	Before September 15, 2010	1991 Standards or UFAS	On or after September 15, 2010 and before March 15, 2012	1991 Standards, UFAS, or 2010 Standards	On or after March 15, 2012	2010 Standards
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 <p>Transportation Facilities</p>	<p><i>DOT's ADA Standards for Transportation Facilities (2006)</i> <i>These standards took effect November 29, 2006, as indicated in a notice published by DOT</i></p>									

ABA Standards

The ABA applies to federally funded facilities. The GSA updated its ABA standards, which apply to most facilities covered by the ABA. Similar standards have been adopted by the USPS for postal facilities and by the DOD for military facilities. All adopt by reference the 2004 ABA Accessibility Guidelines. HUD is responsible for updating its ABA standards, and is the only federal agency that still references the 1984 UFAS.

ABA Standards

Facility	Standards to Follow
 Federal Facilities (other than postal, housing, and military facilities)	GSA's <i>ABA Accessibility Standard (updated)</i> <i>Effective May 8, 2006 (February 6, 2007 for leased facilities), as indicated in GSA's Facility Management Regulation (subpart c)</i>
 Postal Facilities	USPS's <i>ABA Accessibility Standard (updated, also known as the RE-4 Standards)</i> <i>Effective October 1, 2005, as indicated in a notice issued by USPS</i>
 Military Facilities	DOD's <i>ABA Accessibility Standard (updated)</i> <i>Effective October 31, 2008, as indicated in a DOD policy memorandum</i>
 Housing	UFAS <i>HUD to replace UFAS with updated ABA standards</i>

The ADA and ABA standards are available from:

United States Architectural and Transportation Barriers
Compliance Board (ATBCB)
1331 F Street, N. W. Suite 1000
Washington, DC 20004-1111
800-872-2253
202-272-0080
www.access-board.gov/

ADA/ABA Technical Assistance

Technical assistance on the ADA and ABA standards is available from the Board:

phone: 800-872-2253 (voice) or 800-993-2822 (TTY)
weekdays 10 – 5:30 EST (Wed. 10 – 2)

e-mail: ta@access-board.gov

fax: 202-272-0081

ADAAG and ADA/ABA AG is not enforced at the local level. Local building codes usually require building transportation to comply with the American National Standard for Accessible and Usable Buildings and Facilities, ICC/ANSI A117.1 previously CABO/ANSI A117.1. The latest edition is ICC/ANSI A117.1 – 2009. These documents are available from International Code Council (ICC). Procurement information for ICC can be found later in this article.

A comprehensive analysis of the accessibility regulations and where they apply is contained in "ADA and Building Transportation, A Handbook on Accessibility Regulations for Elevators, Wheelchair Lifts and Escalators" by Edward A. Donoghue, CPCA and Brian D. Black. The fourth edition of this handbook is available from:

Elevator World, Inc.
P. O. Box 6507
Mobile, AL 36660
800-730-5093
251-479-4514
<http://www.elevatorbooks.com/>

Building Codes

Elevator installations must also comply with the building code. Building codes in the United States up until 2000 had generally been based on one of the following legacy model building codes:

- National Building Code (NBC)
- Standard Building Code (SBC)
- Uniform Building Code (UBC)

In 2000 the three model building codes published the first International Building Code (IBC), as the successor document to the NBC, SBC, and UBC. The current edition of the IBC is the 2012. The IBC, NBC, SBC, and UBC are available from:

International Code Council (ICC)
5203 Leesburg Pike
Suite 600
Falls Church, VA 22041
703-931-4533
www.iccsafe.org/

In late 2002 NFPA published the first Building Construction and Safety Code™, NFPA 5000. The current edition of NFPA 5000 is the 2012 edition. This code is available from:

National Fire Protection Association (NFPA)
Batterymarch Park
Quincy, MA 02269
800-344-3555
617-770-3000
www.nfpa.org/

Other Resources

The NEII Building Transportation Standards and Guidelines, NEII-1 is an invaluable reference for dimensional, performance, electrical, application, design, and evaluation of building transportation systems. NEII-1 contains the North American industry standards and guidelines needed by architects, consultants, manufacturers, contractors, developers, building owners/operators and code officials. NEII-1 is available for no cost at:

National Elevator Industry Inc.

www.neii.org.

The National Institute of Standards and Technology (NIST) formally the National Bureau of Standards (NBS) has an extensive collection of codes and standards consisting of voluntary standards, state purchasing standards, United States government and foreign standards. The NIST Standards and Information Group can be contacted at:

National Institute of Standards and Technology

Standards Services Building

100 Bureau Drive, MS 2100

Gaithersburg, MD 20899-2150

(301) 975-4040

<http://gsi.nist.gov/global/index.cfm>

A NIST search will result in a list of all applicable standards, the name and address of the issuing organization, the standard number, title, price if known, and the year of publication of the latest revision. There is no charge for an NIST search. They will not supply you with a copy of the code or standard.

A web site that provides business, other organizations and interested citizens with a direct portal to sources of information on the thousands of specifications that government agencies reference in regulations or use to guide their purchasing decisions. From basic tutorials to a searchable database of standards referenced in federal regulations, the web site offers a broad perspective on the government's complex standards landscape. Using "Standards.Gov" visitors can quickly home in on their particular interests, be it standards incorporated into building requirements, specifications for equipment, guidelines for respiratory protection in the workplace or other topics. Links to standards-related web sites maintained by 12 federal departments and independent agencies are featured on the site. This number is likely to grow as other governmental units follow suit and post standards information pertinent to their missions and operations.

Standards.Gov

<http://standards.gov>

National Standards Systems Network

The National Standards Systems Network (NSSN) is a web based system designed to provide users with a wide range of standards information from major standards developers, including developers accredited by the American National Standards Institute, other U.S. private sector standards organizations, government agencies, including the U. S. Department of Defense, and international standards organizations. At its core is an integrated catalog database pointing to over 2300,000 (and growing) standards currently in use. Users can still search for standards, and then place an order with the organizations that provide the standards. Users are able to either view or download a document, as well as order it in any other available formats.

National Standards System Network

www.nssn.org/

CANADIAN CODES AND STANDARDS

The CSA B44 and ASME A17.1 Codes were harmonized and is now published as the Safety Codes for Elevators and Escalators, ASME A17.1/CSA B44. The Canadian and United States Performance-Based Safety Codes for Elevators and Escalators, ASME A17.7/CSA B44.7 is also a harmonized code. Other documents of interest to the Canadian elevator industry include Lifts for Persons with Physical Disabilities; CSA-B355; Private Residences Lifts for Persons with Physical Disabilities; CSA-B613; and Canadian Electrical Code, CSA C22.1. These documents as well as CSA-B44.1/ASME A17.5 can be purchased from:

Canadian Standards Association (CSA)

5060 Spectrum Way, Suite 100

Mississauga, ON L4W 5N6

800-463-6727

416-747-4000

www.csa.ca/

Another important Canadian document is the National Building Code of Canada (NBCC) that can be purchased from:

National Research Council Canada (NRCC)

Institute for Research in Construction

1200 Montreal Road, M-58

Ottawa, ON, Canada K1A 0R6

613-993- 9101

<http://irc.nrc-cnrc.gc.ca/>

ACCREDITED ELEVATOR/ESCALATOR CERTIFICATION ORGANIZATION (AECO)

The ASME A17.7/CSA B44.7 Code requires all new technologies and materials to be approved by Accredited Elevator/Escalator Certification Organization (AECO). An AECO is an independent organization concerned with product safety evaluation which evaluates and awards certificates of conformance with the ASME A17.7/CSA B44.7 Code based on the manufacturers' documented design, risk assessments, and Code Compliance Document. AECOs must be accredited by the American National Standards Institute (ANSI) or the Standards Council of Canada (SCC) and certified as compliant with the ISO Guide 65 program. The following organizations have been accredited as AECOs:

Liftinstituut

www.liftinstituut.com

TÜV SÜD America Inc.

<http://tuvamerica.com/newhome.cfm>

Underwriters Laboratories (UL)

www.ul.com

INTERNATIONAL CODES AND STANDARDS

As the world becomes smaller and smaller international standards will play an important role. ISO 9000, as an example, is a standard series on quality system registration and related issues that has become very popular. The American National Standards Institute (ANSI) is the United States agent for all standards issued by the International Organization for Standardization (ISO) and International Electrotechnical Commission (IEC). ANSI for electronic delivery and IHS Standards Store for printed documents are the United State source for ISO and IEC documents and are the best sources in the United States for standards published by foreign governments and private entities. Procurement information for these sources can be found earlier in this article. Readers of Elevator World in other countries should be able to purchase ISO and IEC Standards from their National Standards Organizations. If not they should contact ISO and IEC in Geneva, Switzerland.

International Organization for Standards (ISO)

Case postale 56

CH-1211 Geneva 20

Switzerland

www.iso.org/iso/

The ISO and IEC can also be found at a joint information center. The site also features the IEC and ISO standards catalogues, standards under development, as well as a dedicated enquiry service. This site allows you to monitor the development and make the greater use of IEC and ISO standards. Other pages include "Reference Publications" which list publications used in the elaboration and/or adoption of International Standards, as well as the WSSN (World Standards

Services Network) portal, which offers links to other standards catalogues and work programs around the world.

ISO/IEC Information Center

www.standardsinfo.net

ISO also maintains a World Standards Services Network (WSSN); a network of publicly accessible World Wide Web servers of standards organizations around the world. Through the Web sites of its members, WSSN provides information on international, regional and national standardization and related activities and services.

World Standards Services Network

www.wssn.net/WSSN/.

The Western European Common Market Standards for elevators and escalators (CEN) can be purchased in the United States from ANSI or IHS Standards Store or:

European Committee for Standardization

<http://www.cenorm.be>.

The ISO, IEC, CEN and CAN standards are available in French and English. Be sure to specify at time of ordering.

Want to know about pending changes in technical regulations in Brazil, the United Kingdom, Korea or any of the 148 nations that are members of the World Trade Organization (WTO)? Then sign up for the “Notify U.S.” service unveiled by the National Institute of Standards and Technology. Notify U.S. is the successor to “Export Alert!”; the e-mail notification system previously offered by NIST and the International Trade Administrations. This new web based service offers a fast, comprehensive, global perspective on proposed technical regulations and conformity assessment procedures that might influence U.S. access to export markets. Notify U.S. provides users with access to notifications and full texts of regulations issued by the WTO members. In addition, users can monitor proposed changes across chosen countries and 41 fields of industrial or technical activities, or they can select a subset of fields. The new, free service is operated by NIST’s National Center for Standards and Certification Information. To learn more and to sign up, go to:

Notify U.S.

www.nist.gov/notifyus

OUT OF PRINT CODES AND STANDARDS

Have the need for a prior edition of the Safety Code for Elevators and Escalators or other out of print documents? Typically the original publisher does not stock out of print documents, though you may want to confirm that with the original publisher. An extensive collection of both current and out of print codes and standards is maintained and available for purchase from:

IHS Standards Store
15 Inverness Way East
Englewood, CO 80112-2776
800-624-3974
www.global.ihs.com/

and:

Document Center Inc.
121 Industrial Road, Suite 8
Belmont, CA 94002
650-591-7600
www.document-center.com/

These firms also act as the sales agent for many of the organizations mentioned in this article.