



Americans with Disabilities Act and Architectural Barriers Act Accessibility Guidelines

July 23, 2004

UNITED STATES ACCESS BOARD

A FEDERAL AGENCY COMMITTED TO ACCESSIBLE DESIGN



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Introduction

On July 23, 2004 the U.S. Access Board published new design guidelines that cover access for people with disabilities under the Americans with Disabilities Act (ADA). These guidelines update access requirements for a wide range of facilities in the public and private sectors covered by the law. They also include updated guidelines for Federal facilities covered by the Architectural Barriers Act (ABA). Both the ADA guidelines and the ABA guidelines, which the Board updated jointly to make them more consistent, address access in new construction and alterations and contain scoping provisions, which indicate what has to comply, and technical specifications, which spell out how compliance is to be achieved.

This new design document is the culmination of a comprehensive, decade-long review and update of the Board's ADA Accessibility Guidelines, which were first published in 1991. Revisions have been made so that the guidelines continue to meet the needs of people with disabilities and keep pace with technological innovations. For example, new provisions for ATMs specify audible output so that people with vision impairments are provided equal access, and reach ranges have been lowered to better serve people who use wheelchairs and persons of short stature. The guidelines also feature a new format and organization and have been extensively edited for greater clarity.

As part of this update, the Board has made its guidelines more consistent with model building codes, such as the International Building Code (IBC), and industry standards. It coordinated extensively with model code groups and standard-setting bodies throughout the process so that differences could be reconciled. As a result, a historic level of harmonization has been achieved which has brought about improvements to the guidelines as well as to counterpart provisions in the IBC and key industry standards, including those for accessible facilities issued through the American National Standards Institute (ANSI). The Board believes that this achievement will greatly facilitate compliance.

The Board's guidelines serve as the baseline for standards used to enforce the ADA and the ABA. These standards, which are maintained by other Federal agencies, such as the U.S. Department of Justice under the ADA, will be updated according to the new guidelines. It is these standards, not the Board's guidelines, which the public must follow.

Answers to Common Questions About the New ADA-ABA Guidelines

How were the guidelines developed?

The Board organized an advisory committee to review the original guidelines and to recommend changes in order to get input from a cross section of stakeholders at the outset of the process. The ADAAG Review Advisory Committee, which included representation from the design and construction industry, the building code community, and people with disabilities, among others, submitted a report to the Board that detailed recommended revisions to the substance, organization, and format of the guidelines. The finalized guidelines are based largely on these recommendations. The Board published the guidelines in proposed form in November, 1999 and made them available for public comment for six months. The Board received over 2,500 public comments on its proposal and finalized the guidelines based on this input.

Should the new guidelines be followed at this time?

No. The Board's guidelines are not mandatory on the public. They serve as the baseline for enforceable standards maintained by other Federal agencies. In this respect, they are similar to a model building code in that they are not required to be followed except as adopted by an enforcing authority. Under the ADA, the Department of Justice (DOJ) (and in the case of transit facilities, the Department of Transportation (DOT)) is responsible for enforceable standards based on the Board's guidelines. These agencies will update their ADA standards based on the new guidelines. In doing so, they will indicate when the new standards are to be followed. Several other agencies (the General Services Administration, Department of Defense, Department of Housing and Urban Development, and the U.S. Postal Service) hold a similar responsibility for standards under the ABA.

“Guidelines” ... “Standards” ... what’s the difference?

Guidelines versus standards ... it's an important distinction under the ADA and ABA. Guidelines are issued by the Board, standards by designated agencies such as DOJ and DOT. Standards are what the public must follow to comply with the laws; the guidelines are what these agencies must follow in setting or updating their standards. When the Board issues guidelines, it does not change compliance for the public until the standards are similarly changed and an effective date set.

What standards should be followed at this time under the ADA ... the ABA?

The existing standards are to be followed until the effective date of the updated standards. ADA standards issued by DOJ and DOT in 1991 based on the Board's original ADA Accessibility Guidelines (ADAAG) remain the standards to follow at this time. (DOJ's regulations permit state and local governments the option of using an earlier standard known as the Uniform Federal Accessibility Standards (UFAS) as an alternative.) Under the ABA, UFAS remains the applicable standard until its replacement by new standards based on the Board's updated guidelines (some Federal agencies have a policy of applying ADAAG in addition to UFAS).

- For public accommodations and commercial facilities subject to title III of the ADA, the enforceable standards are the ADA Standards for Accessible Design originally published by the Department of Justice on July 26, 1991 (28 CFR Part 36, Appendix A) www.ada.gov/stdspdf.htm
- Facilities subject to title II of the ADA may elect to use one of two standards; the Uniform Federal Accessibility Standards (UFAS) or, the ADA Standards for Accessible Design (above).
- Transportation Facilities, subject to titles II and III must comply with the Department of Transportation Standards for Accessible Design (49 CFR Part 37, Appendix A) www.fta.dot.gov/legal/regulations/us_dot/5598_ENG_HTML.htm
- Facilities subject to the Architectural Barriers Act must comply with the Uniform Federal Accessibility Standards (UFAS) www.access-board.gov/ufas/html/ufas.htm

When will the standards be updated?

DOJ and DOT will issue notices on the update of their ADA standards that will provide an opportunity for public comment. In doing so, these agencies will address application issues, such as how much lead time to allow in setting an effective date for the new standards. Gauging the turn-around time for this process, which may vary by agency, is often difficult due to the regulatory steps involved. Under the ABA, standard-setting agencies will follow a similar public comment process or an administrative process in updating their ABA standards. The Board will provide updates on the progress made by the ADA and ABA standard-setting agencies through its newsletter, e-mail updates, and its website.

Where can I get further assistance on the new guidelines?

Accessibility specialists at the Access Board are available to assist you by providing guidance on the use of the ADA and ABA Accessibility Guidelines. You can direct your questions to the Board by phone, fax, or e-mail:

(800) 872-2253 (voice)
 (800) 993-2822 (TTY)
 fax: (202) 272-0081
 e-mail: ta@access-board.gov
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The Access Board is an independent Federal agency committed to design that is accessible to persons with disabilities. Created in 1973 to ensure access to federally funded facilities, the Board is now a leading source of information on accessible design through its development of guidelines and standards.

CHAPTER 7: COMMUNICATION ELEMENTS AND FEATURES

701 General

701.1 Scope. The provisions of Chapter 7 shall apply where required by Chapter 2 or where referenced by a requirement in this document.

702 Fire Alarm Systems

702.1 General. Fire alarm systems shall have permanently installed audible and visible alarms complying with NFPA 72 (1999 or 2002 edition) (incorporated by reference, see “Referenced Standards” in Chapter 1), except that the maximum allowable sound level of audible notification appliances complying with section 4-3.2.1 of NFPA 72 (1999 edition) shall have a sound level no more than 110 dB at the minimum hearing distance from the audible appliance. In addition, alarms in guest rooms required to provide communication features shall comply with sections 4-3 and 4-4 of NFPA 72 (1999 edition) or sections 7.4 and 7.5 of NFPA 72 (2002 edition).

EXCEPTION: Fire alarm systems in medical care *facilities* shall be permitted to be provided in accordance with industry practice.

703 Signs

703.1 General. Signs shall comply with 703. Where both visual and *tactile characters* are required, either one sign with both visual and *tactile characters*, or two separate signs, one with visual, and one with *tactile characters*, shall be provided.

703.2 Raised Characters. Raised *characters* shall comply with 703.2 and shall be duplicated in braille complying with 703.3. Raised *characters* shall be installed in accordance with 703.4.

Advisory 703.2 Raised Characters. Signs that are designed to be read by touch should not have sharp or abrasive edges.

703.2.1 Depth. Raised *characters* shall be 1/32 inch (0.8 mm) minimum above their background.

703.2.2 Case. *Characters* shall be uppercase.

703.2.3 Style. *Characters* shall be sans serif. *Characters* shall not be italic, oblique, script, highly decorative, or of other unusual forms.

703.2.4 Character Proportions. *Characters* shall be selected from fonts where the width of the uppercase letter “O” is 55 percent minimum and 110 percent maximum of the height of the uppercase letter “I”.

703.2.5 Character Height. *Character* height measured vertically from the baseline of the *character* shall be 5/8 inch (16 mm) minimum and 2 inches (51 mm) maximum based on the height of the uppercase letter “I”.

EXCEPTION: Where separate raised and visual *characters* with the same information are provided, raised *character* height shall be permitted to be ½ inch (13 mm) minimum.

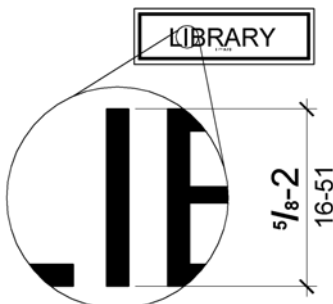


Figure 703.2.5
Height of Raised Characters

703.2.6 Stroke Thickness. Stroke thickness of the uppercase letter “I” shall be 15 percent maximum of the height of the *character*.

703.2.7 Character Spacing. *Character* spacing shall be measured between the two closest points of adjacent raised *characters* within a message, excluding word *spaces*. Where *characters* have rectangular cross sections, spacing between individual raised *characters* shall be 1/8 inch (3.2 mm) minimum and 4 times the raised *character* stroke width maximum. Where *characters* have other cross sections, spacing between individual raised *characters* shall be 1/16 inch (1.6 mm) minimum and 4 times the raised *character* stroke width maximum at the base of the cross sections, and 1/8 inch (3.2 mm) minimum and 4 times the raised *character* stroke width maximum at the top of the cross sections. *Characters* shall be separated from raised borders and decorative *elements* 3/8 inch (9.5 mm) minimum.

703.2.8 Line Spacing. Spacing between the baselines of separate lines of raised *characters* within a message shall be 135 percent minimum and 170 percent maximum of the raised *character* height.

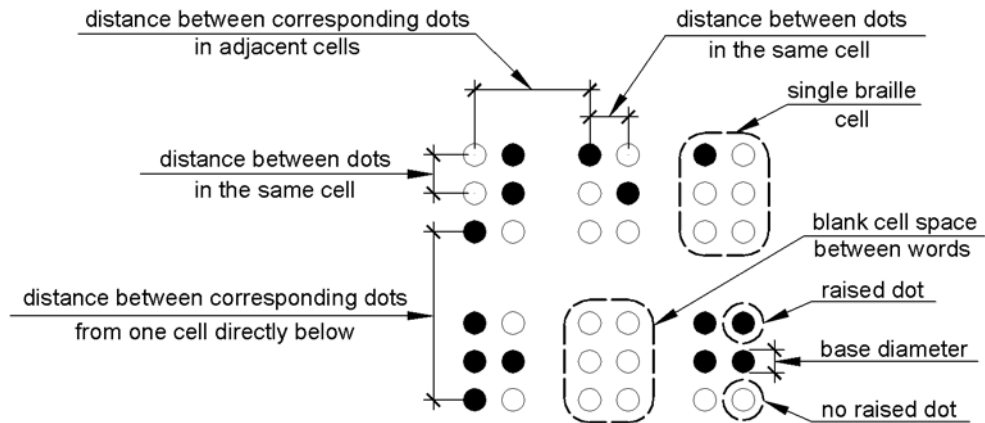
703.3 Braille. Braille shall be contracted (Grade 2) and shall comply with 703.3 and 703.4.

703.3.1 Dimensions and Capitalization. Braille dots shall have a domed or rounded shape and shall comply with Table 703.3.1. The indication of an uppercase letter or letters shall only be used before the first word of sentences, proper nouns and names, individual letters of the alphabet, initials, and acronyms.

Table 703.3.1 Braille Dimensions

Measurement Range	Minimum in Inches Maximum in Inches
Dot base diameter	0.059 (1.5 mm) to 0.063 (1.6 mm)
Distance between two dots in the same cell ¹	0.090 (2.3 mm) to 0.100 (2.5 mm)
Distance between corresponding dots in adjacent cells ¹	0.241 (6.1 mm) to 0.300 (7.6 mm)
Dot height	0.025 (0.6 mm) to 0.037 (0.9 mm)
Distance between corresponding dots from one cell directly below ¹	0.395 (10 mm) to 0.400 (10.2 mm)

1. Measured center to center.



**Figure 703.3.1
Braille Measurement**

703.3.2 Position. Braille shall be positioned below the corresponding text. If text is multi-lined, braille shall be placed below the entire text. Braille shall be separated 3/8 inch (9.5 mm) minimum from any other *tactile characters* and 3/8 inch (9.5 mm) minimum from raised borders and decorative *elements*.

EXCEPTION: Braille provided on elevator car controls shall be separated 3/16 inch (4.8 mm) minimum and shall be located either directly below or adjacent to the corresponding raised *characters* or symbols.

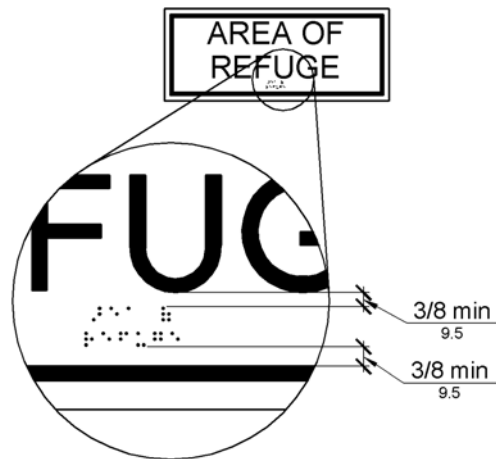


Figure 703.3.2
Position of Braille

703.4 Installation Height and Location. Signs with *tactile characters* shall comply with 703.4.

703.4.1 Height Above Finish Floor or Ground. *Tactile characters* on signs shall be located 48 inches (1220 mm) minimum above the finish floor or ground surface, measured from the baseline of the lowest *tactile character* and 60 inches (1525 mm) maximum above the finish floor or ground surface, measured from the baseline of the highest *tactile character*.

EXCEPTION: *Tactile characters* for elevator car controls shall not be required to comply with 703.4.1.

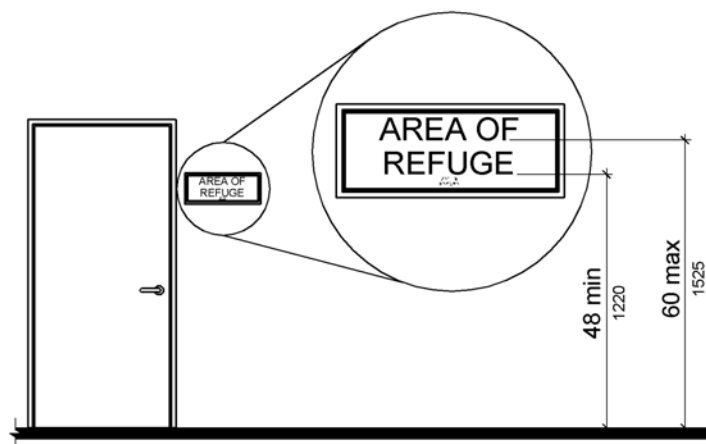


Figure 703.4.1
Height of Tactile Characters Above Finish Floor or Ground

703.4.2 Location. Where a *tactile* sign is provided at a door, the sign shall be located alongside the door at the latch side. Where a *tactile* sign is provided at double doors with one active leaf, the sign shall be located on the inactive leaf. Where a *tactile* sign is provided at double doors with two active leaves, the sign shall be located to the right of the right hand door. Where there is no wall *space* at the latch side of a single door or at the right side of double doors, signs shall be located on the nearest adjacent wall. Signs containing *tactile characters* shall be located so that a clear floor *space* of 18 inches (455 mm) minimum by 18 inches (455 mm) minimum, centered on the *tactile characters*, is provided beyond the arc of any door swing between the closed position and 45 degree open position.

EXCEPTION: Signs with *tactile characters* shall be permitted on the push side of doors with closers and without hold-open devices.

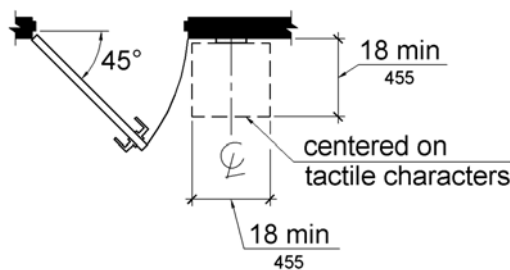


Figure 703.4.2
Location of Tactile Signs at Doors

703.5 Visual Characters. Visual *characters* shall comply with 703.5.

EXCEPTION: Where visual *characters* comply with 703.2 and are accompanied by braille complying with 703.3, they shall not be required to comply with 703.5.2 through 703.5.9.

703.5.1 Finish and Contrast. *Characters* and their background shall have a non-glare finish. *Characters* shall contrast with their background with either light *characters* on a dark background or dark *characters* on a light background.

Advisory 703.5.1 Finish and Contrast. Signs are more legible for persons with low vision when characters contrast as much as possible with their background. Additional factors affecting the ease with which the text can be distinguished from its background include shadows cast by lighting sources, surface glare, and the uniformity of the text and its background colors and textures.

703.5.2 Case. *Characters* shall be uppercase or lowercase or a combination of both.

703.5.3 Style. *Characters* shall be conventional in form. *Characters* shall not be italic, oblique, script, highly decorative, or of other unusual forms.

703.5.4 Character Proportions. *Characters* shall be selected from fonts where the width of the uppercase letter "O" is 55 percent minimum and 110 percent maximum of the height of the uppercase letter "I".

703.5.5 Character Height. Minimum *character* height shall comply with Table 703.5.5. Viewing distance shall be measured as the horizontal distance between the *character* and an obstruction preventing further approach towards the sign. *Character* height shall be based on the uppercase letter “I”.

Table 703.5.5 Visual Character Height

Height to Finish Floor or Ground From Baseline of Character	Horizontal Viewing Distance	Minimum Character Height
40 inches (1015 mm) to less than or equal to 70 inches (1780 mm)	less than 72 inches (1830 mm)	5/8 inch (16 mm)
	72 inches (1830 mm) and greater	5/8 inch (16 mm), plus 1/8 inch (3.2 mm) per foot (305 mm) of viewing distance above 72 inches (1830 mm)
Greater than 70 inches (1780 mm) to less than or equal to 120 inches (3050 mm)	less than 180 inches (4570 mm)	2 inches (51 mm)
	180 inches (4570 mm) and greater	2 inches (51 mm), plus 1/8 inch (3.2 mm) per foot (305 mm) of viewing distance above 180 inches (4570 mm)
greater than 120 inches (3050 mm)	less than 21 feet (6400 mm)	3 inches (75 mm)
	21 feet (6400 mm) and greater	3 inches (75 mm), plus 1/8 inch (3.2 mm) per foot (305 mm) of viewing distance above 21 feet (6400 mm)

703.5.6 Height From Finish Floor or Ground. Visual *characters* shall be 40 inches (1015 mm) minimum above the finish floor or ground.

EXCEPTION: Visual *characters* indicating elevator car controls shall not be required to comply with 703.5.6.

703.5.7 Stroke Thickness. Stroke thickness of the uppercase letter “I” shall be 10 percent minimum and 30 percent maximum of the height of the *character*.

703.5.8 Character Spacing. *Character* spacing shall be measured between the two closest points of adjacent *characters*, excluding word *spaces*. Spacing between individual *characters* shall be 10 percent minimum and 35 percent maximum of *character* height.

703.5.9 Line Spacing. Spacing between the baselines of separate lines of *characters* within a message shall be 135 percent minimum and 170 percent maximum of the *character* height.

703.6 Pictograms. *Pictograms* shall comply with 703.6.

703.6.1 Pictogram Field. *Pictograms* shall have a field height of 6 inches (150 mm) minimum. *Characters* and braille shall not be located in the *pictogram* field.

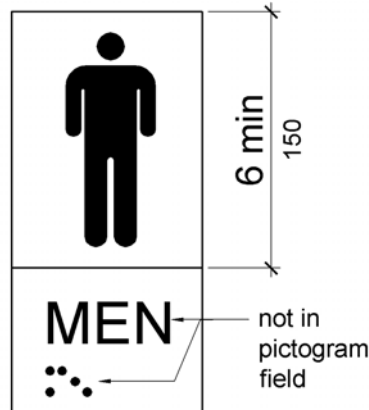


Figure 703.6.1
Pictogram Field

703.6.2 Finish and Contrast. *Pictograms* and their field shall have a non-glare finish. *Pictograms* shall contrast with their field with either a light *pictogram* on a dark field or a dark *pictogram* on a light field.

Advisory 703.6.2 Finish and Contrast. Signs are more legible for persons with low vision when characters contrast as much as possible with their background. Additional factors affecting the ease with which the text can be distinguished from its background include shadows cast by lighting sources, surface glare, and the uniformity of the text and background colors and textures.

703.6.3 Text Descriptors. *Pictograms* shall have text descriptors located directly below the *pictogram* field. Text descriptors shall comply with 703.2, 703.3 and 703.4.

703.7 Symbols of Accessibility. Symbols of *accessibility* shall comply with 703.7.

703.7.1 Finish and Contrast. Symbols of *accessibility* and their background shall have a non-glare finish. Symbols of *accessibility* shall contrast with their background with either a light symbol on a dark background or a dark symbol on a light background.

Advisory 703.7.1 Finish and Contrast. Signs are more legible for persons with low vision when characters contrast as much as possible with their background. Additional factors affecting the ease with which the text can be distinguished from its background include shadows cast by lighting sources, surface glare, and the uniformity of the text and background colors and textures.

703.7.2 Symbols.

703.7.2.1 International Symbol of Accessibility. The International Symbol of *Accessibility* shall comply with Figure 703.7.2.1.



Figure 703.7.2.1
International Symbol of Accessibility

703.7.2.2 International Symbol of TTY. The International Symbol of *TTY* shall comply with Figure 703.7.2.2.



Figure 703.7.2.2
International Symbol of TTY

703.7.2.3 Volume Control Telephones. Telephones with a volume control shall be identified by a *pictogram* of a telephone handset with radiating sound waves on a square field such as shown in Figure 703.7.2.3.



Figure 703.7.2.3
Volume Control Telephone

703.7.2.4 Assistive Listening Systems. *Assistive listening systems* shall be identified by the International Symbol of Access for Hearing Loss complying with Figure 703.7.2.4.



Figure 703.7.2.4
International Symbol of Access for Hearing Loss

704 Telephones

704.1 General. Public telephones shall comply with 704.

704.2 Wheelchair Accessible Telephones. Wheelchair *accessible* telephones shall comply with 704.2.

704.2.1 Clear Floor or Ground Space. A clear floor or ground *space* complying with 305 shall be provided. The clear floor or ground *space* shall not be obstructed by bases, enclosures, or seats.

Advisory 704.2.1 Clear Floor or Ground Space. Because clear floor and ground space is required to be unobstructed, telephones, enclosures and related telephone book storage cannot encroach on the required clear floor or ground space and must comply with the provisions for protruding objects. (See Section 307).

704.2.1.1 Parallel Approach. Where a parallel approach is provided, the distance from the edge of the telephone enclosure to the face of the telephone unit shall be 10 inches (255 mm) maximum.

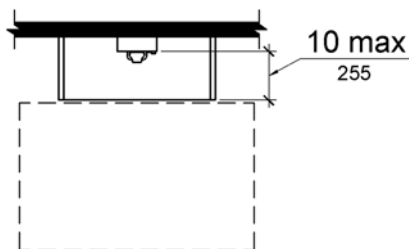


Figure 704.2.1.1
Parallel Approach to Telephone