Braille Signage Guidelines

Approved April 2014

The U.S. Americans with Disabilities Act (ADA) Accessibility Guidelines require the use of braille signage to ensure that people who cannot see to read print may safely access and use a building. This brochure is designed to provide basic guidelines about braille to assist with the production of braille signage. Resources for further assistance are also provided.

People who are blind or visually impaired benefit from braille signs that are placed in convenient and predictable locations. In addition, the braille should be presented horizontally and clear of the sign's edge, unobscured by the frame. Regulations requiring braille on signs have led to an increased presence of braille information in public areas, raising the expectation that braille will be provided in other useful contexts.

What Is Braille?

Braille is a system of touch reading and writing in which the alphabet is represented by the arrangement of six dots in a space called a cell.

- A full cell is three dots high and two dots wide.
- The six dots of the cell are numbered 1, 2, 3 downward on the left and 4, 5, 6, downward on the right.
- A braille character may stand for a single letter of the alphabet, a whole word, a digit, a punctuation mark, or other symbols.
- Only 63 different dot combinations can be formed. The meaning and use of the dot combinations that make up braille characters in North American English follows standard codes defined by the Braille Authority of North America (BANA).
- English braille is read from left to right and top to bottom, the same way English print is read.

- The size of braille characters does not vary. For more information, see the BANA factsheet *Size and Spacing of Braille* at www.brailleauthority.org/sizespacingofbraille.

The Braille Alphabet

a	b	c	d	e	f	g	h	i	j
k	l	m	n	o	p	q	r	s	t
u	v	w	x	y	z				

Contracted and Uncontracted Braille

For general text, the current braille code in the U. S. and Canada is Unified English Braille and contracted. (UEB). Text brailled in this code can be contracted or uncontracted.

Uncontracted braille communicates text using one braille character for each letter of the English alphabet, punctuation, or number. Indicators special to braille—such as the capital letter indicator and the numeric indicator—are also used. For example the word “stairs” in uncontracted braille would use one braille character for each letter, as presented below.

stairs

In the example, which uses simulated braille, the heavy dots represent raised dots while the “shadow dots” represent the unused dots in the six-position configuration.

Contracted braille refers to combinations of the alphabet and symbols to represent words that appear frequently in the English language. It is preferred over spelling out words letter by letter and, thus, it is the most commonly used form of English braille.

- English braille has 180 contractions and shortform words.
- In the United States and Canada, contracted braille is routinely used for most books and magazines.

- The U.S. Americans with Disabilities Act (ADA) Accessibility Guidelines require the use of contracted braille on signage.

Capitalization

In braille, the first word of sentences, proper nouns and names, individual letters, initials, and/or acronyms are capitalized.

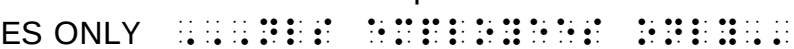
A capital indicator is formed when a single braille dot in the lower right-hand corner (dot 6) of the braille cell is placed before the letters a-z. Capitalization is not required on braille signage.

If all the letters in the word are to be capitalized, a capital word indicator—two single-dot characters in sequence—indicates that all the letters in the following word are capitalized.

To show that three or more words are fully capitalized, place three dot 6 characters before the first word, and place a dot 6 followed by a dot 3 after the last fully capitalized word.

Example: Word with initial cap
Pratt Room 

Example: Word in all caps
NLS Director 

Example: Three or more words in all caps
NLS EMPLOYEES ONLY 

Numbers

Braille digits 1–0 are formed by placing the numeric indicator, dots 3-4-5-6, before letters a–j.

The Braille Numbers

									
1	2	3	4	5	6	7	8	9	0

- A space, hyphen, and slash all terminate the effect of a numeric indicator.

- When numbers are followed by lowercase letters a–j without a space, a grade 1 indicator (dots 5–6) is required to indicate the change from numbers to letters.
- The grade 1 indicator is not required when the first letter after the number is letter k–z.

In the example below, the number 3 is shown preceded by the numeric indicator, and the individual letter “B” is preceded by the grade 1 indicator and the capital indicator.

staircase 3b ⠌⠁⠊⠗⠉⠁⠎⠑ ⠼⠉⠰⠃

Punctuation marks

Punctuation marks that frequently appear in signage are listed below.

- Period ⠲
- Comma ⠂
- Hyphen ⠤

Common Punctuation Marks

⠂	⠆	⠒	⠲	⠖	⠐⠣	⠐⠜	⠦	⠐⠔	⠦	⠴	⠄	⠤
,	;	:	.	!	(	)	?	*	“	”	'	-

The Braille Dot Profile

For comfort and ease of reading, the braille dot profile is ideally rounded and free of sharp edges, burrs, and rough spots.

The measurement range is shown as minimum in inches to 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)

[1] Measured center to center

- Distance between corresponding dots in adjacent cells[2]: 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[3]: 0.395 (10 mm) to 0.400 (10.2 mm)

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.

Foreign Language Code

When transcribing foreign languages, consideration must be given to the country of origin. The code for transcribing any language, including English, depends on the prevailing language and the country in which the document is written. For example, Spanish braille is somewhat different when it is written in the United States, Mexico, England, or Spain. Commercial braille translation software is available for the proper generation of braille in a wide variety of languages and contexts.

Braille Translation and Proofreading

Good braille copy for signs can be produced with commercial translation software that generates braille text and a suitable font that controls dot sizing and spacing. Although errors are infrequent when using such software, complete accuracy in every circumstance cannot be guaranteed. Therefore, braille copy should be proofread by qualified persons who know braille codes, and final sizing and spacing should be checked. Specialized braille-production services have the capacity to produce final braille copy.

[2] Ibid
[3] Ibid

Resources

American Council of the Blind
2200 Wilson Blvd., Suite 650
Arlington, VA 22201
(202)467-5081, 800-424-8666
Fax: (703) 465-5085
www.acb.org

American Foundation for the Blind
Information Center
2 Penn Plaza, Suite 1102
New York, NY 10121
(212)502-5658, 800-232-5463
Fax: (646) 478-9555
www.afb.org

Braille Authority of North America
www.brailleauthority.org

CNIB (Canadian National Institute for the Blind)
National Coordinator, Braille Production
1929 Bayview Avenue
Toronto ON
M4G 3E8
Canada
www.cnib.ca

Library of Congress
National Library Service for the Blind and Physically Handicapped
1291 Taylor Street, NW
Washington, DC 20542
(202) 707-5100, 800-424-8567
www.loc.gov/nls

National Federation of the Blind
200 E. Wells Street at Jernigan Place
Baltimore, MD 21230
(410) 659-9314
Fax: (410) 685-5653
www.nfb.org

United States Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530-0001
www.usdoj.gov

This fact sheet distributed by The Braille Authority of North America
www.brailleauthority.org

For more information about the Braille Authority of North America (BANA) and Unified English Braille (UEB), visit www.brailleauthority.org.