

Shared-Rideables Regulatory Changes 2021 – Braille and Raised Text Standard

On August 17, 2021, City Council adopted changes to the regulations around shared-rideables. One of the changes includes a requirement that each device have a braille and raised text identifier with the shared-rideable business name, telephone number, and the device's unique identification number. All operators must be in conformance with this issued standard by October 11, 2021.

Ordinance Language: Bear permanent markings in a visible location and in braille and raised text identifying the shared-rideable business name and telephone number and the shared-rideable's unique identification number.

Identifier Location: The braille and raised text identifiers must be placed in a consistent location on all devices.

- Scooters – on stem toward the top near the handlebars
- Bikes – on the area between handlebars and the frame or on the stem

The City's ADA Coordinator provided the following specifications for braille and raised text excerpted from the 2019 California Building Code to guide the expectations for braille and raised text measurements, dimensions, fonts, size, and contrast between the characters and their background.

Braille.

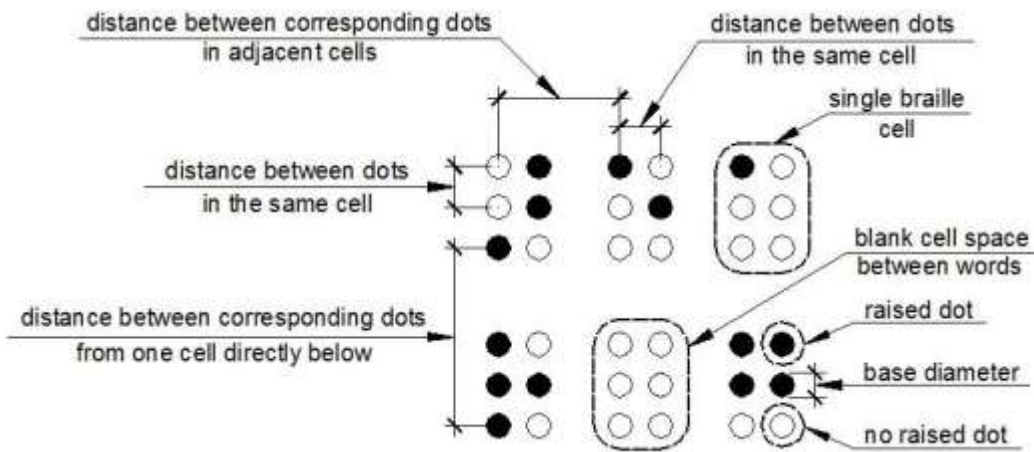
Braille shall be contracted (Grade 2).

Dimensions and capitalization. Braille dots shall have a domed or rounded shape. Squared Braille is not allowed. 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.

Braille Dimensions

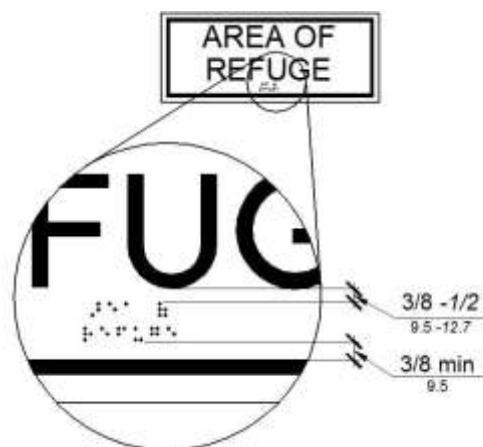
Measurement Range	Minimum in Inches Maximum in
Dot base diameter	0.059 (1.5 mm) to 0.063 (1.6 mm)
Distance between two dots in the same cell ¹	0.100 (2.5 mm)

Distance between corresponding dots in adjacent cells ¹	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.	



Braille Measurement

Position. Braille shall be positioned below the corresponding text in a horizontal format, flush left or centered. If text is multi-lined, Braille shall be placed below the entire text. Braille shall be separated 3/8-inch (9.5 mm) minimum and 1/2-inch (12.7 mm) maximum from any other tactile characters and 3/8-inch (9.5 mm) minimum from raised borders and decorative elements.



Tactile-Raised characters.

Tactile/Raised text characters that are designed to be read by touch should not have sharp or abrasive edges. Raised text characters must be accompanied by Grade 2 (contracted) Braille. Non-glare finish for both the characters and the background, which contrast with each other either light-on-dark or dark-on-light. Research indicates that signs are more legible for persons with low vision when characters contrast with their background by at least 70 percent.

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

Case. Characters shall be uppercase.

Style. Characters shall be sans serif fonts. Characters shall not be italic, oblique, script, highly decorative, or of other unusual forms. Simple or heavy serif fonts of any kind are not allowed.

Character proportions. Characters shall be selected from fonts where the width of the uppercase letter "O" is 60 percent minimum and 110 percent maximum of the height of the uppercase letter "I".

Character height. Character height measured vertically from the baseline of the character shall be 5/8-inch (15.9 mm) minimum and 2 inches (51 mm) maximum based on the height of the uppercase letter "I".

Stroke thickness. Stroke thickness of the uppercase letter "I" shall be 15 percent maximum of the height of the character.

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.

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.

Format. Text shall be in a horizontal format.