

SECTION 10400

IDENTIFYING DEVICES

PART 1 – GENERAL

1.1 SUMMARY

- A. **Requirement of Products Covered Under This Section: Provide and install interior and exterior room identification signs, geometric restroom signs, tactile exit signs and interior and exterior directional and informational signs including signs for accessible features, regulatory and life safety signs.**
- B. **Related Standards:**
1. **California Building Code (CBC Title 24, 2001) Sections 1114b, 115B.5 and 117B.5.**
 2. **CBC Title 24 Fire Safety Code (Title 19, latest edition).**
 3. **ADA Accessibility Guidelines (ADAAG, 1992 and 2005 edition, www.access-board.gov/ada-aba/final.htm).**
 4. **ICC/ ANSI A117.1 – 1998. American National Standards. Accessible and Usable Buildings and Facilities. International Code Council. 5203 Leesburg Pike, Suite 703, Falls Church, VA 2204, (703-931-4533).**
 5. **Division of the State Architect, California, Checklist 17 (www.dsa.ca.gov).**

1.2 SYSTEM DESCRIPTION FOR ADA ACCESSIBILITY GUIDELINES

703.1. General. Signs shall comply with 1.2. Where both visual and tactile characters are required, either on signs 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 font 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 , (16mm) 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 1/2 inch (13 mm) minimum.

703.2.6 Stroke Width. Stroke width 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 the 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

703.3.1 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.

703.3.1 Braille Dimensions

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

1.3 SUBMITTALS

- A. General: Submit in accordance with Section 01330.
- B. Product Data: Submit product data for each type of sign.
- C. Shop Drawings: Include drawing of each sign type, indicating size of sign plaque, corner radius, fonts or type styles of characters, symbols and pictograms, Braille placement where applicable, materials, material thickness and colors of substrate and character. Show installation details.
- D. Samples: Provide one sample room identification sign demonstrating fabrication technique for tactile characters and Braille that follows California specifications.

1.4 QUALITY ASSURANCE

- A. Sign fabricators shall submit three references showing projects completed within the last three years. Both tactile and non-tactile signage shall be included in the work.
- B. One year warranty shall be provided for all signs or components of signs, except for damage by mishandling by building owner, including installation by building owner or representative, or vandalism.

PART 2 – PRODUCT

2.1 MANUFACTURERS

- A. Provide products from Braille Signs, Inc. 1815 E. Wilshire Ave, Ste 901, Santa Ana, CA 92705. Phone (949) 797-1570, Fax: (714) 486-3627, website www.braillesignsinc.com or email contact@braillesignsinc.com or approved equal. Other manufacturers must submit their signage products to the Architect ten days prior to the bid date for approval to be considered as an equal.

2.2 PLAQUE SIGNS

- A. Solid acrylic Tactile Room, Restroom, Identification Signs: Provide signs with aluminum header, if required, as shown on the Drawings.
- B. Accessible restroom signage shall be door signs as required by Title 24 and Americans with Disabilities Act (ADA). Provide at rooms indicated on the drawings.
- C. Signs shall comply with all requirements of California Title 24 and ADA
- D. Signs shall read as indicated on the Drawings, or sign schedule.
- E. Colors shall be selected by the Architect from standard colors for the manufacturer. Custom colors are available upon request.

2.2B MATERIALS AND FABRICATION

A. Acrylic DC ADA with High Perceived Value:
ADA signs unite image and style to meet the needs of sustainable building environments. Certified ADA fabrication processes and materials, low VOC paint and UV digitally printed graphics create beautiful signage solutions with little to no negative impact on the environment. The standard ADA materials provide a design-friendly palette of colors and patterns, which can be combined to create beautiful and unique signage solutions that work for any building setting.



- A. Copy and Braille: ADA-Ready™ tactile letters and direct print Raster™ Braille with matte finish.
- B. Graphics: Low VOC paint and UV digitally printed graphics available on select standard materials.
- C. Thickness: 0.0312", 0.0625", 0.125", 0.25", 0.50" thicknesses available on select standard materials.
- D. Colors: Matthews color selector color chart for background and RGB or PMS color for images, copy and Braille.
- E. Corners and Edges: Eased, rounded or beveled for user safety.
- F. Exterior informational and directional signs; Fabricated of 0.080 aluminum. Graphics shall be screen printed of exterior quality high performance vinyl, computer cut.
- G. Fasteners:
 - a.) Stainless steel tamper-proof screws and plastic anchors.
 - b.) Signs mounted on fire-rated doors shall be secured with adhesive only.
 - c.) Adhesive and sealants shall comply with the limits for VOC content when calculated according to 40 CFR 59, Subpart D (EPA method 24).

2.2 FINISH

- A. Signs:
 1. Clean out debris from routing procedure around tactile characters.
 2. Wipe signs free of smudges after installation.

PART 3 – EXECUTION

3.1 EXAMINATION

- A. Examine conditions and proceed with Work in accordance with Section 01700.
- B. Measure installation surfaces to ensure there is adequate space for each sign.

3.2 INSTALLATION

- A. Install plumb, level, square and rigidly secured in accordance with Section 01700. Use countersunk screws for exterior wall signs. Use double faced tape for signs on glass, with backer. Use double faced tape for interior signs on painted walls or doors, where there is little vandalism concern.