Sutter Signage
Accessibility Compliance
June 7, 2016

Bill Zellmer AIA, CASp – Accessibility Architect - Sutter Health
Bill Zellmer AIA, CASp, Accessibility Architect
Sutter Health

1995 – 2009: OSHPD
- Plan Review – North Region, Coastal Region, South Region
- Development of OSHPD Policies / Interpretations / CAN 2-11B

2009 – 2012: Stafford King Wiese Architects
- Barrier Removal Work - Kaiser
- Various Hospital Remodel Projects, Queen of the Valley Hospital - Napa
- 3rd Party Plan Review – Highland Hospital, Sutter Castro Valley

2012 – 2014: Vanir Construction Management
- Accessibility Field Surveying - Sutter Health, California State Prisons
- 3rd Party Plan Review – Sutter Health, King Khalid Medical City

2014-2016: Accessibility Architect – Sutter Health
- Manage Technical Interpretations by Sutter Consultants
- Survey Facilities / Prepare Reports
- Develop Policies / Interpretations
- Assist Project Teams in Project Scoping
- California Building Standards Commission – Healthcare Advisory Committee
- Certified Access Specialist Institute (CASI) - President
- California Society of Healthcare Engineers (CSHE) – Facility Member
Outline

Start at 9:00 AM

Sutter ADA Consent Decree: 5 min.
Accessibility Standards 5 min.
Signage - Scoping 5 min.
Signage – Technical Requirements 5 min.
Recent Projects - Specific Problems 20 min.
Sutter Signage Standards 5 min.
2016 CBC – Changes Related to Signage 5 min.
Q & A 10 min.
Sutter ADA Consent Decree
Sutter ADA Consent Decree

Class Action Lawsuit – Consent Decree  2008 - 2018

Physical Access Compliance = PAC (Under FPS)

- Program Manager: Stella Sze
- Accessibility Architect: Bill Zellmer CASp
- Project Manager: Mary Ellen Medinilla
- Project Manager: Stephanie Juskie
- Project Control Technician: Oscar Gonzales
- Project Control Technician: Burnette Allen

3rd Party Access Specialists

- Plan Review and Field Monitoring

Legal - Team Members

- Julie Rainey – Sutter - Office of General Counsel
- Disability Rights Advocates (DRA) – Class Counsel for Plaintiff
- Evan Terry Associates (ETA) – Court Appointed Access Experts
Accessibility Standards
Two Standards

California Building Code - (CBC)
ADA Standards - (ADAS)

CBC is our primary resource.
State Law requires that CBC Standards at least meet the ADAS
But, the ADA Standards have concepts that are not in the CBC
2013 CBC: Chapter 11B – Accessibility

Table of Contents

Division 1 – Application
Division 2 – Scoping
Division 3 – Building Blocks
Division 4 – Accessible Routes
Division 5 – Site Elements
Division 6 – Plumbing Elements
Division 7 – Communication
Division 8 – Special Spaces
Division 9 – Built-In Elements
Division 10 – Exercise Areas
Signage – Scoping
CODE CITATIONS:

11B-216.1 General. New or altered signs shall be provided in accordance with Section 11B-216 and shall comply with Section 11B-703. The addition of or replacement of signs shall not trigger any additional path of travel requirements.

Exceptions:

1. Building directories, menus, seat and row designations in assembly areas, occupant names, building addresses, and company names and logos shall not be required to comply with Section 11B-216.

Examples of signage that must meet access requirements:

- Hours of operation
- ‘No smoking’
- Room numbers and names
- Exit signage
- ‘Credit cards accepted’
- ‘Please turn off cell phones’

Examples of signage that are exempt from access requirements:

- Company Name
- Building Address
- Company Logo
- People’s names
Designations
(Tactile Signage)

CODE CITATIONS:

11B-216.2 Designations. Interior and exterior signs identifying permanent rooms and spaces shall comply with Sections:

11B-703.1
11B-703.2
11B-703.3
11B-703.5

Where pictograms are provided as designations of permanent rooms and spaces, the pictograms shall comply with Section 11B-703.6 and shall have text descriptors complying with Sections 11B-703.2 and 11B-703.5.

Exception: Exterior signs that are not located at the door to the space they serve shall not be required to comply with Section 11B-703.2.
Designations
(Tactile Signage)

ADVISORIES:

DOJ Advisory 11B-216.2 Designations.
Section 11B-216.2 applies to signs that provide designations, labels, or names for interior rooms or spaces where the sign is not likely to change over time. Examples include interior signs labeling restrooms, room and floor numbers or letters, and room names.

Tactile text descriptors are required for pictograms that are provided to label or identify a permanent room or space.

Pictograms that provide information about a room or space, such as "no smoking," occupant logos, and the International Symbol of Accessibility, are not required to have text descriptors.

DSA Advisory 11B-216.2 Designations
People with visual impairments benefit from tactile signs containing raised characters and/or symbols and accompanying Braille. They also benefit from an orderly scheme of consecutive room numbers for way-finding, though way-finding is not required by code.

Tactile exit signs complying with Chapter 10 contribute to a safe environment for people with visual impairments.
Designations
(Tactile Signage)

- **Examples:**
  
  - 1. Room Names and Room Numbers
    
    - Note that Chapter 10 (Egress) also requires exit signage at doors to comply with tactile requirements
Directional / Informational (Visual Signage)

CODE CITATIONS:

11B-216.3 Directional and informational signs. Signs that provide direction to or information about interior and exterior spaces and facilities of the site shall comply with Section:

11B-703.5 (Visual Characters)
Directional / Informational
(Visual Signage)

ADVISORIES:

DOJ Advisory 11B-216.3 Directional and informational signs.
Information about interior and exterior spaces and facilities includes rules of conduct, occupant load, and similar signs.

Signs providing direction to rooms or spaces include those that identify egress routes.
Directional / Informational (Visual Signage)

- **Examples:**

- 1. Direction, Information, Rules of Conduct
Signage – Technical Requirements
CODE CITATIONS:

11B-703.2 Raised characters. Raised characters shall comply with Section 11B-703.2 and shall be duplicated in Braille complying with Section 11B-703.3. Raised characters shall be installed in accordance with Section 11B-703.4.

11B-703.2.1 Depth. Raised characters shall be 1/32 inch (0.8 mm) minimum above their background.

11B-703.2.2 Case. Characters shall be uppercase.

11B-703.2.3 Style. Characters shall be sans serif. Characters shall not be italic, oblique, script, highly decorative, or of other unusual forms.

11B-703.2.4 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”.

11B-703.2.5 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”.

11B-703.2.6 Stroke thickness. Stroke thickness of the uppercase letter “I” shall be 15 percent maximum of the height of the character.

11B-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...

11B-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.

11B-703.2.9 Format. Text shall be in a horizontal format.
**CODE CITATIONS:**

**11B-703.3 Braille.** Braille shall be contracted (Grade 2) and shall comply with Sections 11B-703.3 and 11B-703.4.

**11B-703.5 Visual characters.** Visual characters shall comply with Section 11B-703.5.

**11B-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.

**11B-703.7.2.6 Toilet and bathing facilities geometric symbols.** Doorways leading to toilet rooms and bathing rooms shall be identified by a geometric symbol complying with Section 11B-703.7.2.6. The symbol shall be mounted at 58 inches minimum and 60 inches maximum above the finish floor or ground surface measured from the centerline of the symbol. Where a door is provided the symbol shall be mounted within 1 inch of the vertical centerline of the door.

**DOJ Advisory 11B-703.3 Braille.** Contracted Braille uses special characters called contractions to make words shorter. Standard English uses contractions like "don't" as a short way of writing two words, such as "do" and "not." In Braille there are many additional contractions. Some contractions stand for a whole word and other contractions stand for a group of letters within a word. In addition to contractions, the Braille code includes short-form words which are abbreviated spellings of common longer words. For example, "tomorrow" is spelled "tm", "friend" is spelled "fr", and "little" is spelled "ll" in Braille.
**CODE CITATIONS:**

**11B-703.3 Braille.** Braille shall be contracted (Grade 2) and shall comply with Sections 11B-703.3 and 11B-703.4.

**1B-703.5 Visual characters.** Visual characters shall comply with Section 11B-703.5.

**11B-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.

**11B-703.7.2.6 Toilet and bathing facilities geometric symbols.** Doorways leading to toilet rooms and bathing rooms shall be identified by a geometric symbol complying with Section 11B-703.7.2.6. The symbol shall be mounted at 58 inches minimum and 60 inches maximum above the finish floor or ground surface measured from the centerline of the symbol. Where a door is provided the symbol shall be mounted within 1 inch of the vertical centerline of the door.

**DOJ Advisory 11B-703.3 Braille.** Contracted Braille uses special characters called contractions to make words shorter. Standard English uses contractions like "don't" as a short way of writing two words, such as "do" and "not." In Braille there are many additional contractions. Some contractions stand for a whole word and other contractions stand for a group of letters within a word. In addition to contractions, the Braille code includes short-form words which are abbreviated spellings of common longer words. For example, "tomorrow" is spelled "tm", "friend" is spelled "fr", and "little" is spelled "ll" in Braille.
Recent Projects – Specific Problems
Recent Projects – Specific Problems

1. Specifications cite 2010 CBC instead of 2013

2. Lack of Contrast in Sign (Between Letters and Background)
   A. Standard Application
   B. Vinyl Letters on Glass

3. Glare on Sign
   A. Signage Inserts
   B. Vinyl Letters on Glass

4. Letter Size is too small
   A. Standard Application
   B. Evacuation Maps

5. Braille is not California Compliant (Doesn’t Meet 2013 CBC)

6. Braille domes are ‘blobby’ not a ‘domed or rounded’ shape
Specifications cite 2010 CBC instead of 2013 CBC

- 2010 CBC covers projects through January 1, 2011
- 2013 CBC covers projects from January 1, 2014 to present

Braille Measurements

California Braille is significantly different from ADA Braille. California "Contracted Grade 2 Braille" shall be used whenever Braille symbols are specifically required. (See C.B.C. Section 1117B.5.6) Compliance with CBC Braille automatically assures the compliance with Federal 2010 ADA, Sec 703.3 since California requirements are much stricter than the federal ones.

Title 24 requires the following Braille specifications:
- 1/10th inch is required between each dot within a cell, measured from the dot centers.
- 2/10th inch is required between each cell within a word.
- Measure from the center of the dots in the second column of the first cell to the center of the dots in the first column of the next cell.
- Dots must be a minimum of 1/40th inch high at the apex, as in the following figures:

Update to 2013 CBC (11B-703.3)
Problem 2: Lack of Contrast in Sign: A. Standard Application

11B-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.

‘Medium’ Not Allowed
Problem 2: Lack of Contrast in Sign: A. Standard Application

11B-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.

Do Not Use ‘Medium’ Colors From Sutter Standards

Project Team Must Verify Code Compliance:
Medium Grey may not contrast adequately with either light or dark background.
Problem 2: Lack of Contrast in Sign: B. Vinyl Letters on Glass

11B-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.

Glass ‘Background’ Not Allowed

The ‘background’ changes depending on lighting
Problem 2: Lack of Contrast in Sign: B. Vinyl Letters on Glass

11B-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.

However, it would be OK to have a Vinyl Backing on the Outside of the Glass with Vinyl Lettering over that.
Problem 2: Lack of Contrast in Sign: B. Vinyl Letters on Glass

11B-216.1 General.
Exceptions: 1. Building directories, menus, seat and row designations in assembly areas, occupant names, building addresses, and company names and logos shall not be required to comply with Section 11B-216.

Company Names, Addresses and Logos Allowed
Problem 2: Lack of Contrast in Sign: B. Vinyl Letters on Glass

11B-216.1 General.
Exceptions: 1. Building directories, menus, seat and row designations in assembly areas, occupant names, building addresses, and company names and logos shall not be required to comply with Section 11B-216.

Various Iterations of ‘Sutter Health’ Allowed

Examples of Exemptions Allowed:
• Sutter Imaging
• Sutter Medical Foundation
• Alta Bates Summit Medical Center
• Sutter Walk-In
• Palo Alto Medical Foundation
• Sutter Psychiatric
• CPMC Davies Campus – Family Clinic
• Etc.
Problem 2: Lack of Contrast in Sign: B. Vinyl Letters on Glass

A List of Services inside the building is **NOT** exempt, and **must comply** with signage code requirements for contrast.

Therefore, signage on glass not allowed in this situation.
Problem 3: Glare on Sign: A. Signage Inserts

11B-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.

Clear Plastic Cover Must Have ‘Non-Glare’ Finish
Problem 3: Glare on Sign: B. Vinyl Letters on Glass

11B-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.

Vinyl Letters on Glass not Allowed due to Glare

However, A Vinyl Backing on Outside of Glass resolves the issue
Problem 4: Letter Size is Too Small: A. Standard Application

Tactile Signage:

11B-703.2.5 Character height. Character height measured vertically from the baseline of the character shall be 5/8 inch minimum and 2 inches (51 mm) maximum based on the height of the uppercase letter “I”.

5/8” Minimum Height
Problem 4: Letter Size is Too Small: A. Standard Application

Visual Characters:

11B-703.5.5 Character height. Minimum character height shall comply with Table 11B-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 11B-703.5.5 Visual Character Height

<table>
<thead>
<tr>
<th>Height to Finish Floor or Ground From Baseline of Character</th>
<th>Horizontal Viewing Distance</th>
<th>Minimum Character Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 inches (1016 mm) to less than or equal to 70 inches (1778 mm)</td>
<td>less than 72 inches (1829 mm)</td>
<td>5/8 inch (15.9 mm)</td>
</tr>
<tr>
<td></td>
<td>72 inches (1829 mm) and greater</td>
<td>5/8 inch (15.9 mm), plus 1/8 inch (3.2 mm) per foot (305 mm) of viewing distance above 72 inches (1829 mm)</td>
</tr>
<tr>
<td>Greater than 70 inches (1778 mm) to less than or equal to 120 inches (3048 mm)</td>
<td>less than 180 inches (4572 mm)</td>
<td>2 inches (51 mm)</td>
</tr>
<tr>
<td></td>
<td>180 inches (4572 mm) and greater</td>
<td>2 inches (51 mm), plus 1/8 inch (3.2 mm) per foot (305 mm) of viewing distance above 180 inches (4572 mm)</td>
</tr>
<tr>
<td>greater than 120 inches (3048 mm)</td>
<td>less than 21 feet (6401 mm)</td>
<td>3 inches (76 mm)</td>
</tr>
<tr>
<td></td>
<td>21 feet (6401 mm) and greater</td>
<td>3 inches (76 mm), plus 1/8 inch (3.2 mm) per foot (305 mm) of viewing distance above 21 feet (6401 mm)</td>
</tr>
</tbody>
</table>
11B-703.5.5 Character height. Minimum character height shall comply with Table 11B-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”.

Isn’t minimum height to be 5’8" lettering.
Problem 4: Letter Size is Too Small: B. Evacuation Signs

11B-703.5.5 Character height. Minimum character height shall comply with Table 11B-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”.

Exception: Where provided, floor plans providing emergency procedures information in accordance with Title 19 shall not be required to comply with Section 11B-703.5.5.

The CBC Exception Does Not Exist in ADA Therefore, the 5/8” Minimum applies
Problem 4: Letter Size is Too Small: B. Evacuation Signs

Solution:
Suggest Minimizing Number of WORDS on Evac. Maps
Problem 5: Braille is not California Compliant (Doesn’t Meet CBC Requirements)

11B-703.3.1 Dimensions and capitalization. Braille dots shall have a domed or rounded shape and shall comply with Table 11B-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 11B-703.3.1 Braille Dimensions

<table>
<thead>
<tr>
<th>Measurement Range</th>
<th>Minimum in Inches</th>
<th>Maximum in Inches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dot base diameter</td>
<td>0.059 (1.5 mm)</td>
<td>to 0.063 (1.6 mm)</td>
</tr>
<tr>
<td>Distance between two dots in the same cell</td>
<td>0.100 (2.5 mm)</td>
<td></td>
</tr>
<tr>
<td>Distance between corresponding dots in adjacent cells</td>
<td>0.300 (7.6 mm)</td>
<td></td>
</tr>
<tr>
<td>Dot height</td>
<td>0.025 (0.6 mm)</td>
<td>to 0.037 (0.9 mm)</td>
</tr>
<tr>
<td>Distance between corresponding dots from one cell directly below</td>
<td>0.395 (10 mm)</td>
<td>to 0.400 (10.2 mm)</td>
</tr>
</tbody>
</table>

1. Measured center to center.

Figure 11B-703.3.1 Braille Measurement
### Table 11B-703.3.1 Braille Dimensions

<table>
<thead>
<tr>
<th>Measurement Range</th>
<th>Minimum in Inches</th>
<th>Maximum in Inches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dot base diameter</td>
<td>0.059 (1.5 mm)</td>
<td>to 0.063 (1.6 mm)</td>
</tr>
<tr>
<td>Distance between two dots in the same cell(^1)</td>
<td>0.100 (2.5 mm)</td>
<td></td>
</tr>
<tr>
<td>Distance between corresponding dots in adjacent cells(^1)</td>
<td>0.300 (7.6 mm)</td>
<td></td>
</tr>
<tr>
<td>Dot height</td>
<td>0.025 (0.6 mm)</td>
<td>to 0.037 (0.9 mm)</td>
</tr>
<tr>
<td>Distance between corresponding dots from one cell directly below</td>
<td>0.395 (10 mm)</td>
<td>to 0.400 (10.2 mm)</td>
</tr>
</tbody>
</table>

1. Measured center to center.

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**2013 CBC**

- ADA = .090 to .1
- ADA = .241 to .3

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**Figure 11B-703.3.1**

Braille Measurement
### Table 703.3.1 Braille Dimensions

<table>
<thead>
<tr>
<th>Measurement Range</th>
<th>Minimum in Inches</th>
<th>Maximum in Inches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dot base diameter</td>
<td>0.059 (1.5 mm)</td>
<td>0.063 (1.6 mm)</td>
</tr>
<tr>
<td>Distance between two dots in the same cell¹</td>
<td>0.090 (2.3 mm)</td>
<td>0.100 (2.5 mm)</td>
</tr>
<tr>
<td>Distance between corresponding dots in adjacent cells¹</td>
<td>0.241 (6.1 mm)</td>
<td>0.300 (7.6 mm)</td>
</tr>
<tr>
<td>Dot height</td>
<td>0.025 (0.6 mm)</td>
<td>0.037 (0.9 mm)</td>
</tr>
<tr>
<td>Distance between corresponding dots from one cell directly below¹</td>
<td>0.395 (10 mm)</td>
<td>0.400 (10.2 mm)</td>
</tr>
</tbody>
</table>

¹ Measured center to center.

CBC = .1
CBC = .3
Same as CBC

**Figure 703.3.1**
Braille Measurement
Problem 5: Braille is not California Compliant (Doesn’t Meet CBC Requirements)

Dot Spacing – Case Study:

• Per 2013 CBC: Distance between corresponding dots in adjacent cells must be \(0.3”\)
• Analyze the 5 letter word ‘close’ (5 letters = 4 spaces)
• 4 spaces \(\times 0.3” = 1.2”\)

Actual Condition = less than 1”
Non-Compliant to CBC
Problem 5: Braille is not California Compliant (Doesn’t Meet CBC Requirements)

Dot Spacing – Tool:

• Sharon Toji – (562) 423-6600
  www.accesscommconsulting.com

Non-Compliant Dots – Too big to fit into the tool.
Problem 5: Braille is not California Compliant
(Doesn’t Meet CBC Requirements)

Dot Spacing – Tool:

• Sharon Toji – (562) 423-6600
  www.accesscommconsulting.com

Compliant Dots – fits snugly into the tool.
Problem 6: Braille domes are ‘blobby’ not a ‘domed or rounded’ shape

11B-703.3.1 Dimensions and capitalization. **Braille dots shall have a domed or rounded shape** and shall comply with Table 11B-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.

Raster and Thermoformed Braille preferred – (Sharon Toji)
Photopolymer not preferred
Signage / Braille

- **Sutter Interior Signage Standard:**
  - Available through your local Affiliate or PM
  - Updated in 2016 to Match Sutter Branding
Sutter Interior Signage Standard:

- Details
- Inserts
- Evacuation Maps
- Color Palettes
- Etc.
Signage / Braille

- Sutter Interior Signage Standard:
  
  - Company Name and Logo are Exempt and not required to meet contrast requirements.
Signage / Braille

- **Sutter Interior Signage Standard:**

  Project Team Must Verify Code Compliance:

  Medium Grey may not contrast adequately with either light or dark background.
2016 CBC – Signage Changes
Upcoming 2016 CBC Changes

2016 CBC Effective Date: January 1, 2017

- Change from ‘Unisex’ to ‘Gender Neutral’
- Change from ‘Signage’ to ‘Signs’
- Signage at Parking – Intended for Pedestrians
- Geometric Signs at Toilet Room ‘Entrance’, not ‘Door’
Signage

CODE CITATIONS:

11B-216.5.2 Parking facilities. Signs within parking facilities shall comply with 11B-216.5.2.

11B-216.5.2.1 Signs intended for use by pedestrians. Signs intended for use by pedestrians within parking facilities, including directional or informational signs indicating parking sections or levels, shall comply with the requirements of Section 11B-216.

11B-216.5.2.2 Additional signs. Signs within parking facilities containing parking spaces complying with Section 11B-502 shall comply with 11B-502.8.

11B-216.8.1 Geometric Symbols. Geometric symbols complying with Section 11B-703.7.2.6 shall be provided at entrances to toilet and bathing rooms.

Exceptions:
1. Geometric symbols shall not be required at entrances to toilet and bathing rooms located within semi-private rooms or spaces. Such spaces include but are not limited to; patient sleeping rooms, transient lodging guest rooms, and residential dwelling units.

2. Geometric symbols shall not be required at entrances to inmate toilet rooms and bathing rooms in detention and correctional facilities where only one gender is housed.
Questions