UNIVERSITY of WYOMING

Interior Room & Space Identification Sign Standard

Prepared by: University of Wyoming UW Operations Facilities Architecture Office August 2016

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10 14 23 Panel Signage

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Excerpts from the 2010 ADA Standards for Accessible Design

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SECTION 10.14.23 – INTERIOR PANEL SIGNAGE

PART 1 – GENERAL

1.1 SUMMARY - This section includes the following types of signs: ADA interior signage system.

1.2 DEFINITIONS

A. <u>ADA Accessibility Guidelines (2010)</u>: U.S. Department of Justice "Americans with Disabilities Act (ADA) Accessibility Guideline": ADA Standards for Accessible Design (REVISED, 2010 Standards), for scoping and technical requirements for new construction and alterations; result of the adoption of revised 2010 Standards in the final rules for Title II (28 CFR part 35) and Title III (28 CFR part 36).

1.3 SUBMITTALS

A. <u>General</u>: Submit the following in accordance with the conditions of the construction contract and Division 1 Specification Sections.

B. <u>Samples</u>: Provide the following samples of each sign component for initial selection of color, pattern, and surface texture as required and for verification of compliance with requirements indicated.

1. <u>Type D Sign</u>: (1) Type D sign from the Interior Sign Details Key (See Drawing Sheets 1 and 5 for reference). Any Type D sign from the schedule provided is acceptable.

2. <u>Type I Sign</u>: (1) Type I sign from the Interior Sign Details Key (See Drawing Sheets 1 and 15 for reference).

3. <u>Mounting Methods</u>: Screws, anchors, and tape required for the installation of signs on all substrates present in project. Field verify all substrates prior to providing submittals.

1.4 QUALITY ASSURANCE

A. <u>Single Source Responsibility</u>: All signs shall be from a single vendor.

B. <u>Regulatory Requirements</u>: Comply with the most stringent of applicable provisions in ADA Accessibility Guidelines, the International Code Council 2012 International Building Code, and the Laramie Unified Development Code (most current adopted editions respectively). Attached are excerpts from the 2010 ADA Standards for Accessible Design (REVISED, 2010 Standards).

C. <u>Product Options</u>: The drawings and specifications indicate sizes, profiles and dimensional requirements of signs. Other signs with minor deviations from indicated dimensions and profiles may be considered, provided deviations do not change the design concept. The burden of proof of equivalence is on the proposer.

1.5 COORDINATION - Coordinate placement of anchorage devices with templates for installing signs.

1.6 DELIVERY, STORAGE & HANDLING

A. Deliver components appropriately packed to prevent damage.

B. Store in secure areas, out of weather and protected from work of other trades.

1.7 WARRANTY - Provide one year warranty covering manufacturing and installation defects.

PART 2 – PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by the following:
 - 1. Architectural Frame System: The JRS Company Inc.
 - 2. Frame Background: Gravotech, Inc.
 - 3. Panel Text and Symbols: Gravotech, Inc.
 - 4. Panel Vinyl Lettering: 3M
 - 5. Installation Tape: 3M
 - 6. Panel Magnets: Magnetics

2.2 MATERIALS

A. <u>Panel Plastic Laminate</u>: Provide high-pressure plastic laminate engraving stock with face and core plies of the same color with a matte finish.

B. <u>Panel Magnets</u>: Provide adhesive backed magnetic strips covering the length of the back side of panel inserts and not to exceed the length and width of the panel.

C. <u>Frame Aluminum Extrusions</u>: Provide aluminum extrusions of alloy and temper recommended by the aluminum producer or finisher for the type of use and finish indicated, and with not less than the strength and durability properties specified in ASTM B221 for 6063-T5.

D. <u>Panel Vinyl Film</u>: Provide opaque non-reflective 3M 7725 Scotchcal Electrocut Graphic Film 24" – 7725-10 White vinyl film, 0.0035-inch minimum thickness, with pressure-sensitive adhesive backing, suitable for exterior as well as interior applications.

E. <u>Install Fasteners</u>: Use concealed fasteners fabricated from metals that are non-corrosive to the sign material and mounting surface.

F. <u>Adhesive Tape</u>: Provide 1/16" Thick 3M VHB Double Coated Acrylic Foam Tape, to be field applied.

G. Magnetic Tape: Magnum Magnetics flexible sheeting .020" with Adhesive or equivalent.

2.3 PANEL SIGNS

A. <u>General</u>: These Specifications represent the acceptable minimum fabrication standards. Products that meet or exceed the performance may be substituted when approved by the University of Wyoming (UW) Operations representative.

B. Fabrication: Comply with the following requirements for the fabrication of the finished product.

1. Comply with requirements indicated for materials, thicknesses, finishes, colors, designs, shape, sizes and details of construction.

2. Produce smooth, even, level sign panel surfaces, constructed to remain flat under installed conditions within a tolerance of plus or minus 1/16" measured diagonally.

3. <u>Framed Panel Signs</u>: Fabricate frames to profile indicated; comply with the following requirements for materials and corner conditions:

Frame material: Aluminum, extruded, 1/16" frame thickness, depth of 1/2".

<u>Frame Filler</u>: 1/8" Masonite filler creating a 5/16" inside depth, with suitable factory installed continuous metal background for magnetic signs. Pre drill holes for 1/8" countersunk screws.

Corner conditions: 3/8" radius corners

<u>Panel material</u>: 1/8" plastic laminate to fit tight inside frame, with no greater than 1/16" gap.

<u>Panel Size</u>: Dimensions are for panel size, frame thickness shall be added to panel for full sign size as specified in sign detail drawings.

<u>Removable Panel</u>: Panels for sign types A-G.1 shall be removable for future changes, either with suction cup or removal tool. Removable signs shall have continuous magnetic material on the back to hold in place.

<u>Non-Removable Panels</u>: Panels for sign types H-R shall be prepared to mount with double sided foam tape. Panels to be inserted after installation of frame.

4. <u>Graphic Content and Style</u>: Provide sign copy that complies with the requirements indicated for size, style, spacing, content, position, material, finishes, and colors of letters, numbers and other graphic devices.

A. <u>Tactile Copy (Raised Copy)</u>: Raised 1/32" minimum characters and Grade 2 Braille. Braille shall be Raster Braille. Type style shall be Sans Serif or Helvetica with width-to-height ratio of between 3:5 and 1:1 and stroke width to height ratio of between 1:5 and 1:10. Character height shall be a minimum of 5/8", numbers shall be 5/8" in height. Characters shall be all caps.



B. <u>Applied Copy</u>: Die-cut characters from 1/32" adhesive backed engraving stock. Apply copy to exposed face of the sign panel. Colors shall meet the specifications.

C. <u>Mounting</u>: Provide for concealed countersunk screw mounting to wall. Predrilled holes shall be approximately 1/8" in diameter. Refer to installation detail drawing 8.

D. Colors and finishes:

Sign panel: GravoTac Interior: Matte Surface - Chocolate Brown

Copy: GravoTac Matte White

Graphics: GravoTac Matte White

Access Symbol: GravoTac Matte White

Raster Braille: Color shall match sign panel or clear.

Frame: JRS Arch Bronze; smooth, anodized aluminum.

E. Schedule: See project specific documents.

2.4 FINISHES, GENERAL

A. Protect mechanical finished or exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

B. Noticeable variations from provided samples in appearance of abutting or adjacent pieces are not acceptable.

PART 3 – EXECUTION

3.1 EXAMINATION

A. Installer shall examine substrates, areas, and conditions for compliance with requirements for installation tolerances and other conditions affecting performance of work. Contact UW Operations representative with questions on atypical installations.

B. Proceed with installation only after unsatisfactory conditions have been corrected and approval is received from The UW Operations representative.

3.2 INSTALLATION

A. <u>Location</u>: Locate signs and accessories according to accessibility requirements, UW standards, and project specific documents. Mounting methods shall be of types described in this section and complying with



manufacturer's written instructions. Install signs level, plumb, and at heights indicated, with sign surfaces free of distortion and other defects in appearance (See attached Installation Details for reference).

B. Fasteners:

1. <u>Screw-Mounted Signs</u>: Signs shall be screw-mounted on most surfaces using an appropriate anchor and screw manufactured specifically for the surface/substrate on which the sign is being mounted.

2. <u>3M Foam Tape-Mounted Signs</u>: To be uses only when screw-mounting is not applicable due to substrate material. Install panel signs with foam double-face tape manufactured for the specific purpose of permanently mounting signs. Press firmly to ensure adhesive adheres to substrate. In the instance where the sign is mounted on glass, provide matching opaque plate (glass backer) on opposite side of glass to conceal mounting materials.

3. Other: All other forms of installation shall be decided by The UW Operations representative.

C. <u>Assembly</u>: Final assembly of the signs shall occur in the field after installation of frames.

3.3 CLEANING AND PROTECTION

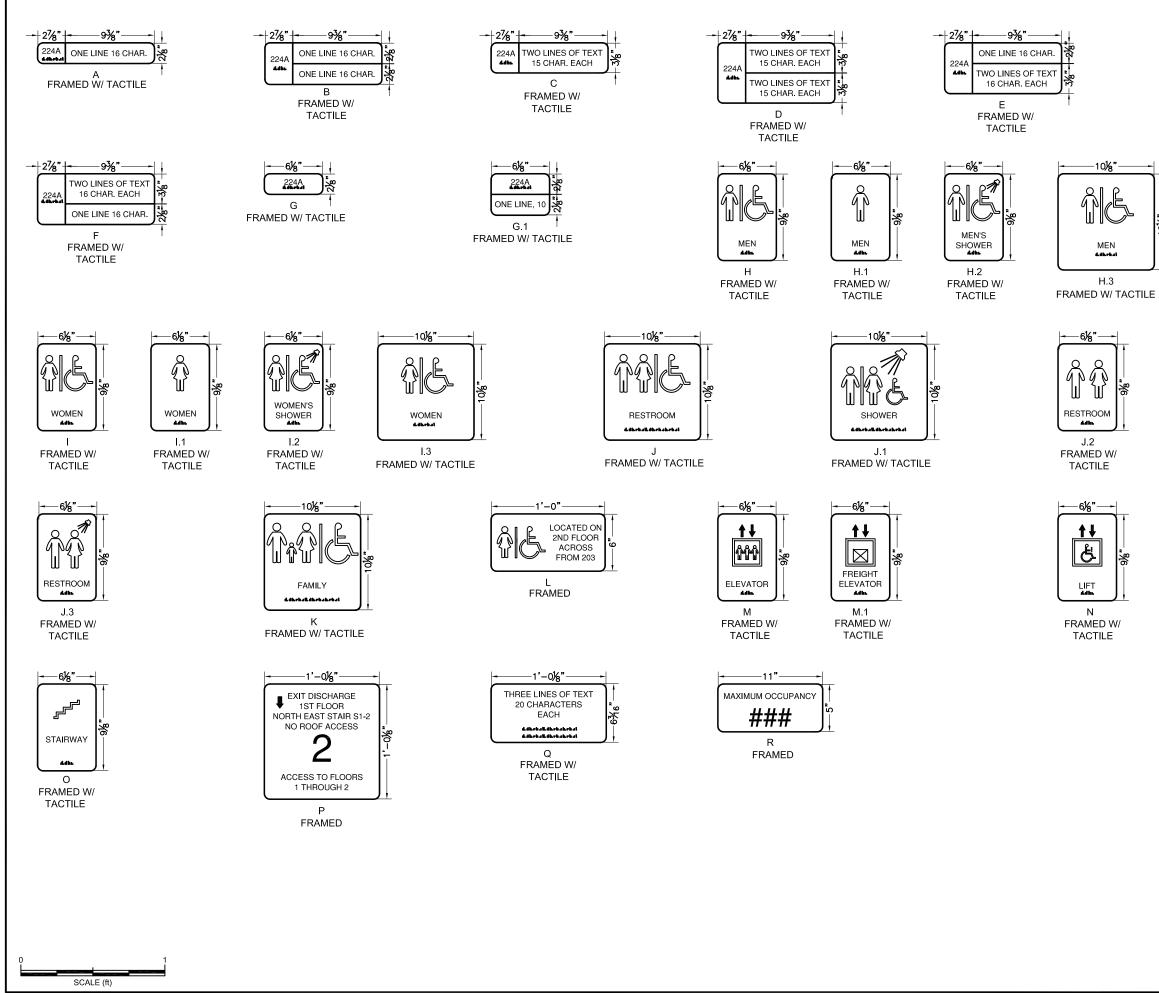
A. After installation, soiled sign surfaces shall be cleaned in accordance to manufacturer's written instructions. Protect signs and adjacent wall surfaces from damage until acceptance by Owner.

3.4 SIGNAGE SCHEDULE

A. All sign projects shall have a Sign Schedule and Sign Location Plans provided by the project design team. Questions regarding the proper location of signs shall be brought to UW Operations representative.

END OF SECTION

Sign Details

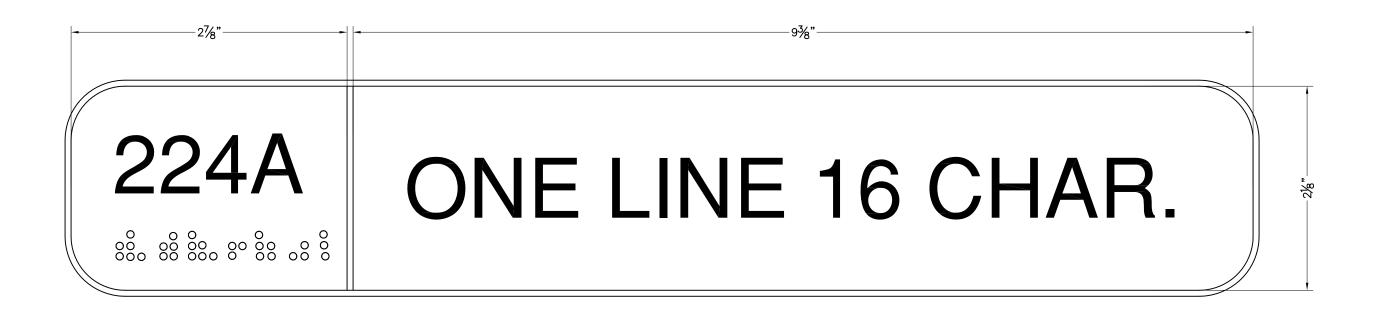


GENERAL NOTES - ALL SHEETS:

- 1. ALL SIGNS SHALL COMPLY WITH 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN, CHAPTER 7, COMMUNICATION **ELEMENTS & FEATURES**
- 2. DIMENSIONS ARE TO INTERIOR FACE OF FRAME OF EACH INSERT SECTION
- 3. FRAME THICKNESS IS 光6"
- 4. ALL TEXT HEIGHT IS 5%" UNLESS NOTED OTHERWISE
- 5. STANDARDS COLORS -FRAME: JRS ARCH BRONZE -BACKGROUND: GRAVO-TAC INTERIOR: MATTE SURFACE-CHOCOLATE BROWN -TEXT AND SYMBOLS MATTE WHITE
- 6. CORNER RADIUS IS 3/4"
- 7. DEPTH OF FRAME IS ½"
- 8. TACTILE ROOM NUMBERS FOR SIGNS A-G
- 9. TACTILE WORDS FOR SIGNS H-O
- 10. MAGNETIC INSERTS FOR SIGNS A-G
- 11. DOUBLE STICK FOAM TAPE FOR INSERTS ON SIGNS H-R (TAPE TO BE APPLIED DURING INSTALLATION)



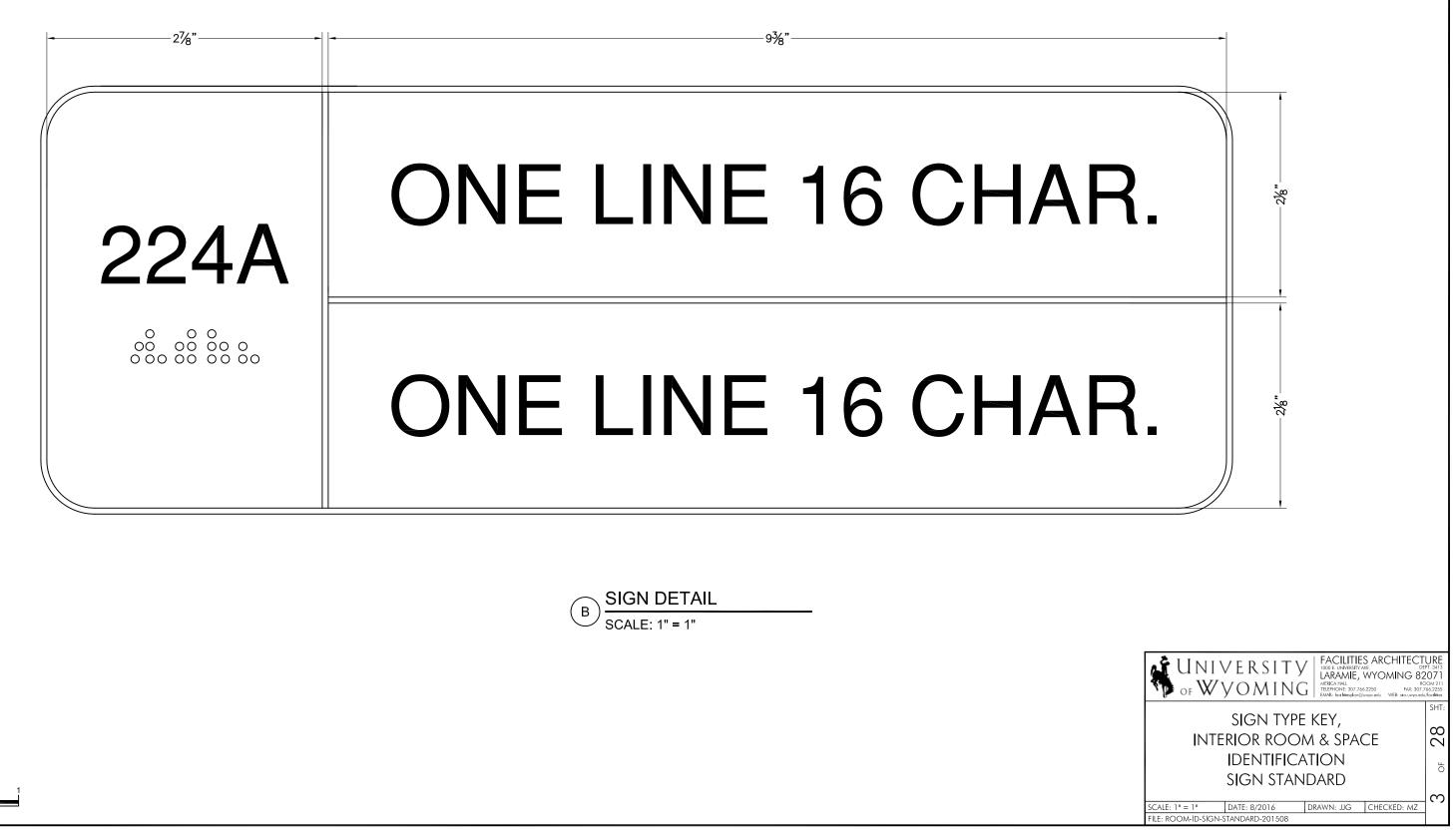


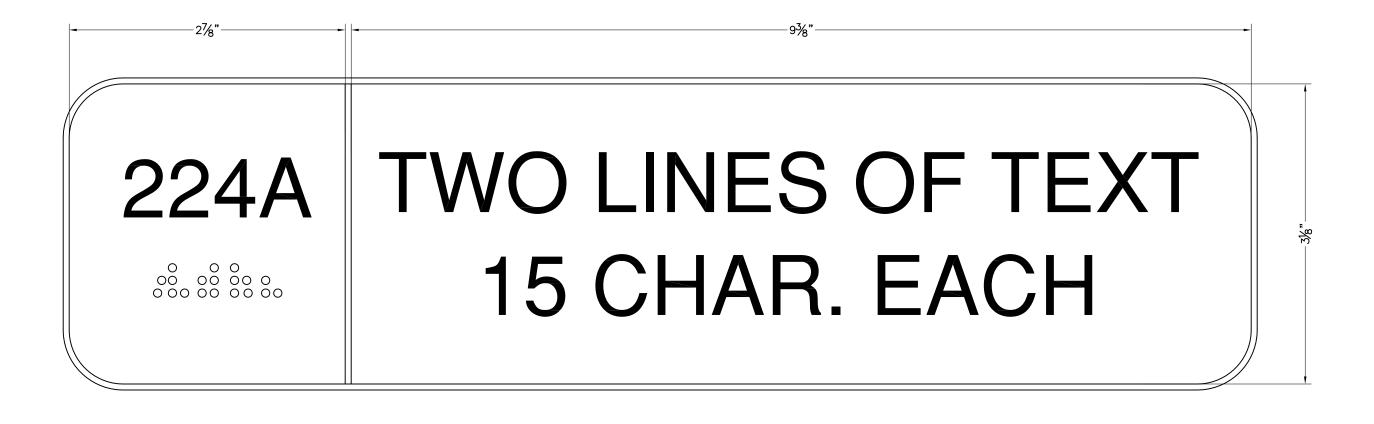


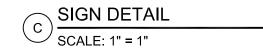
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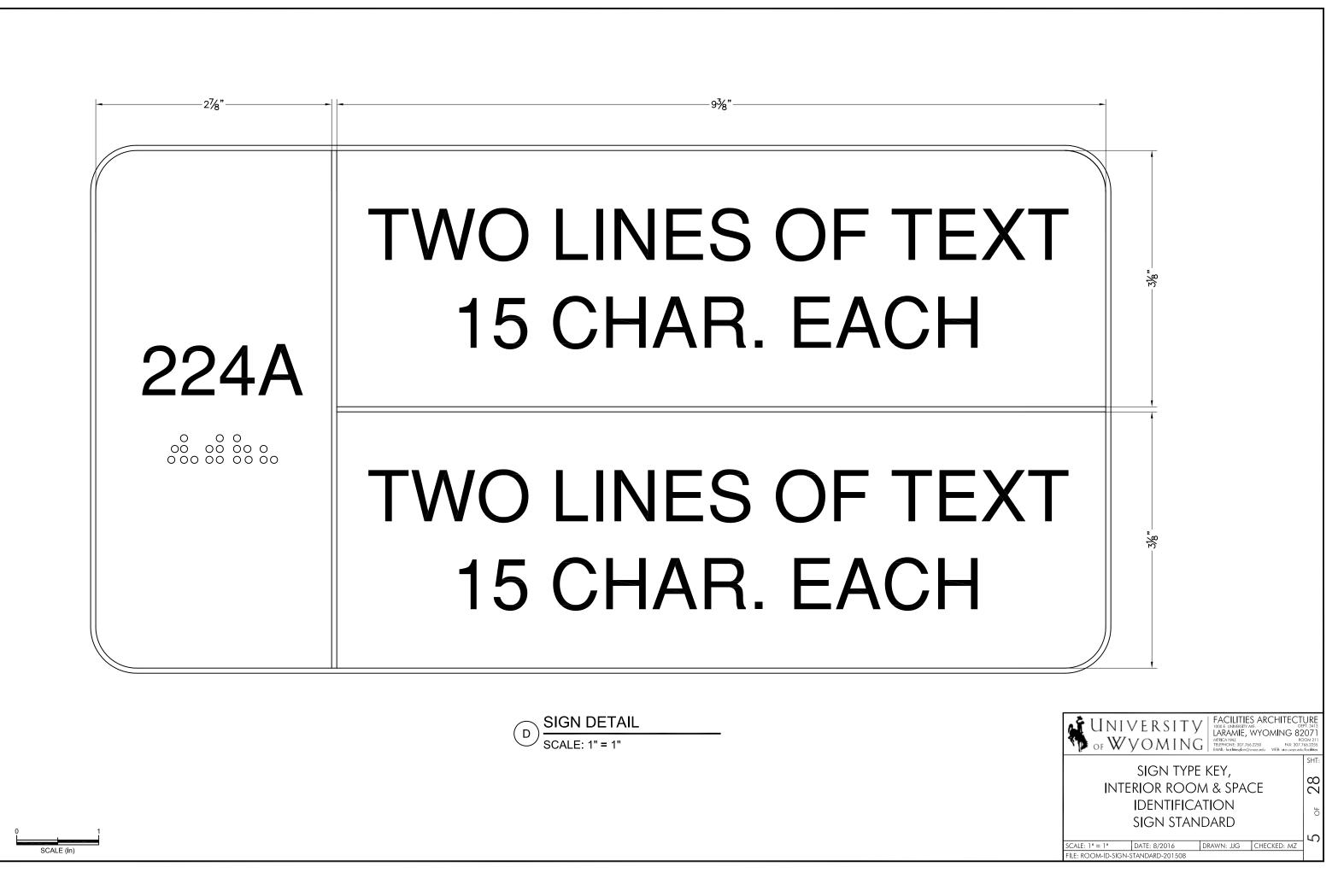


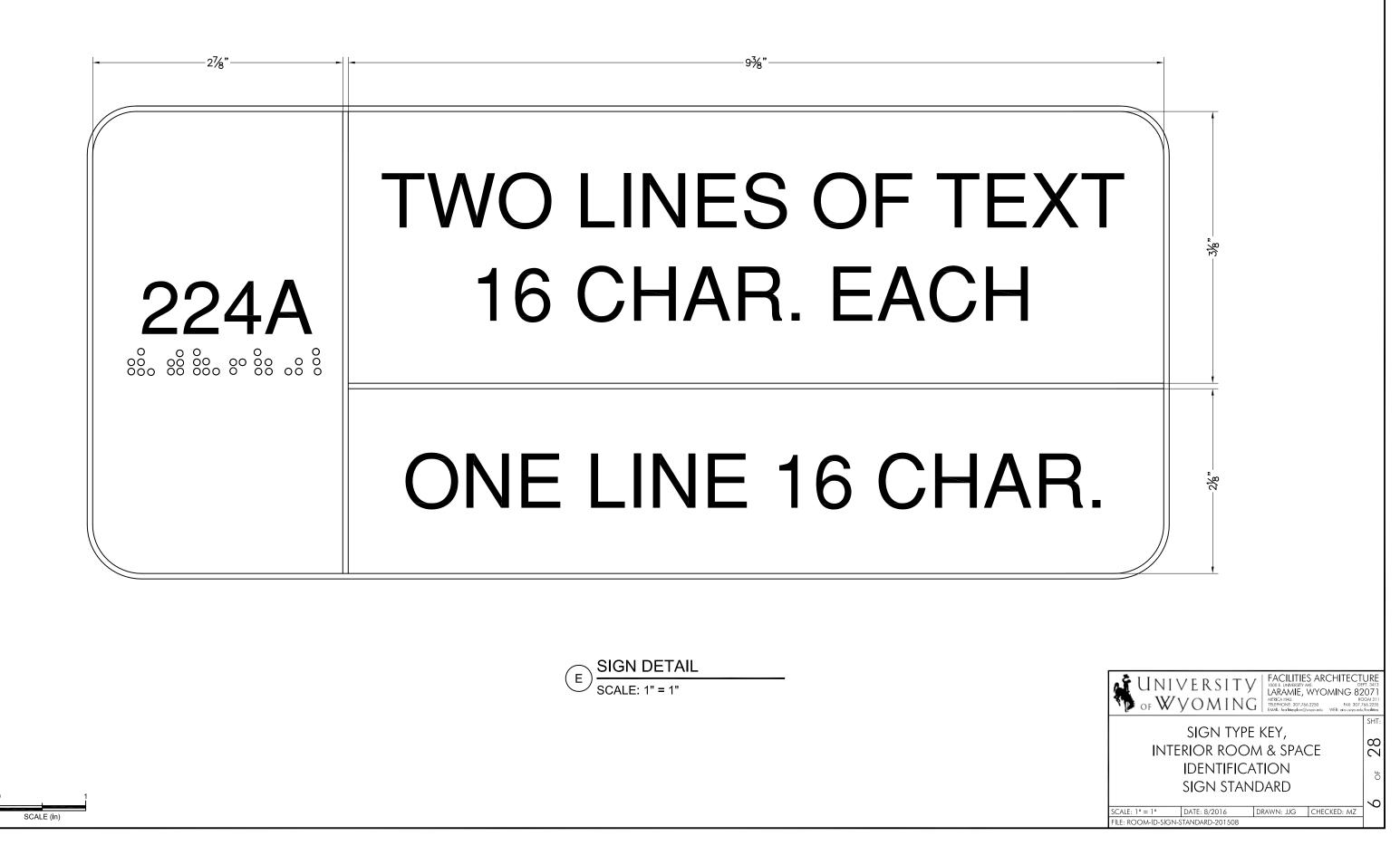


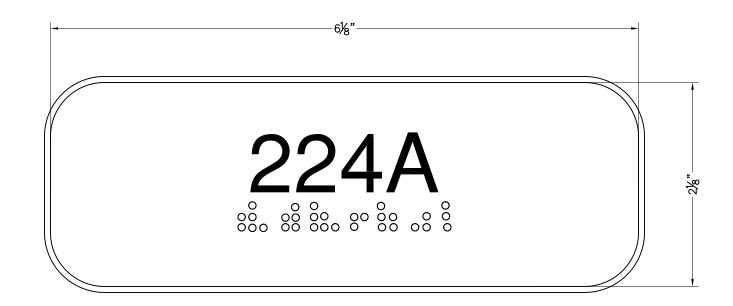






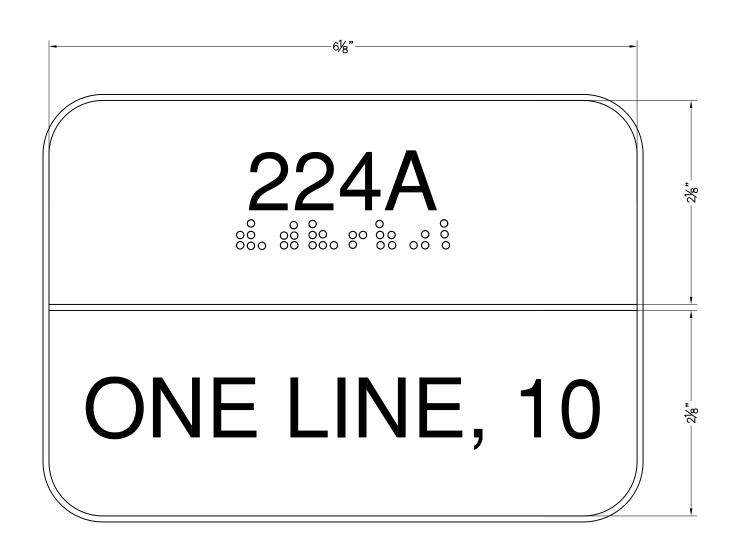






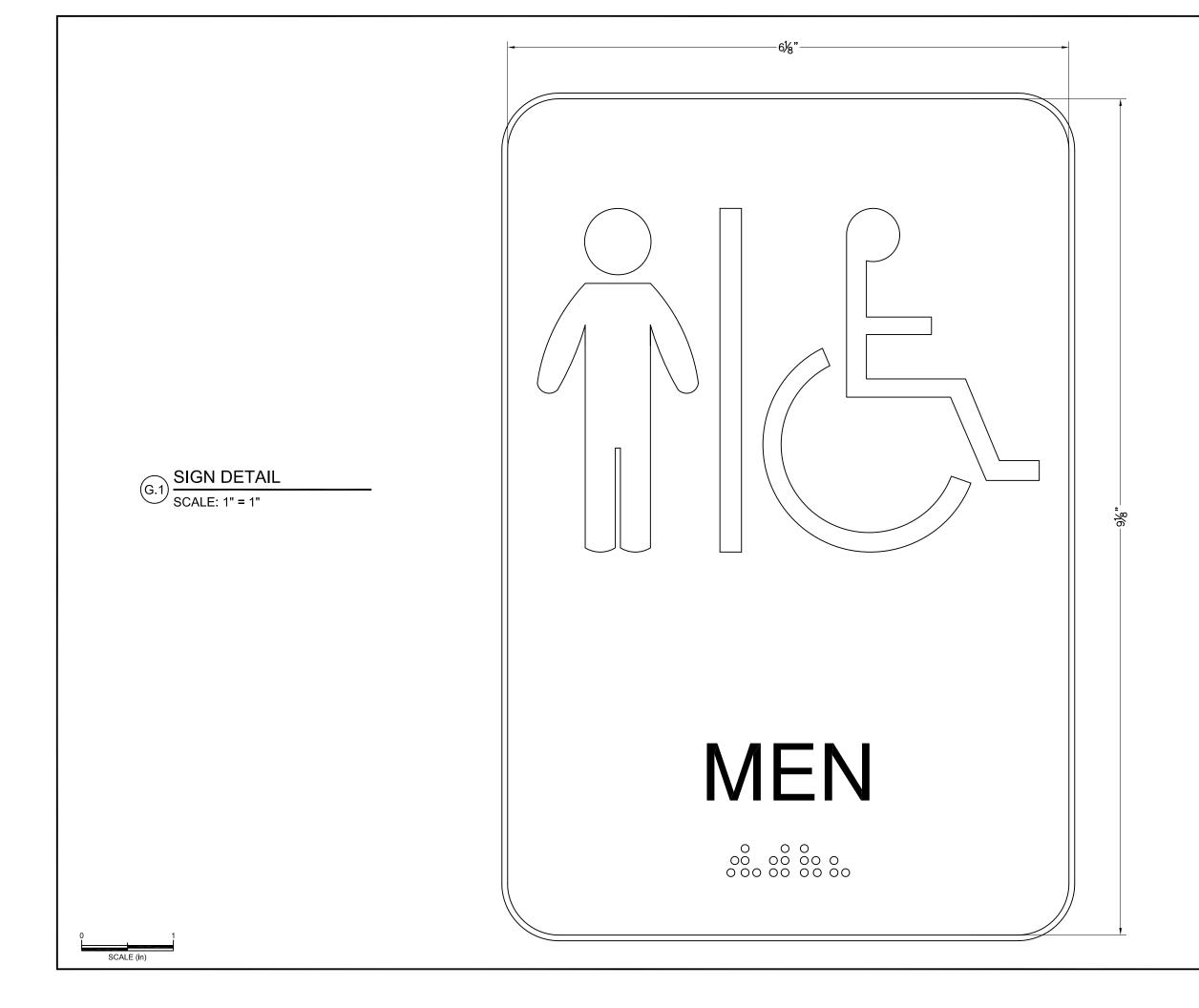


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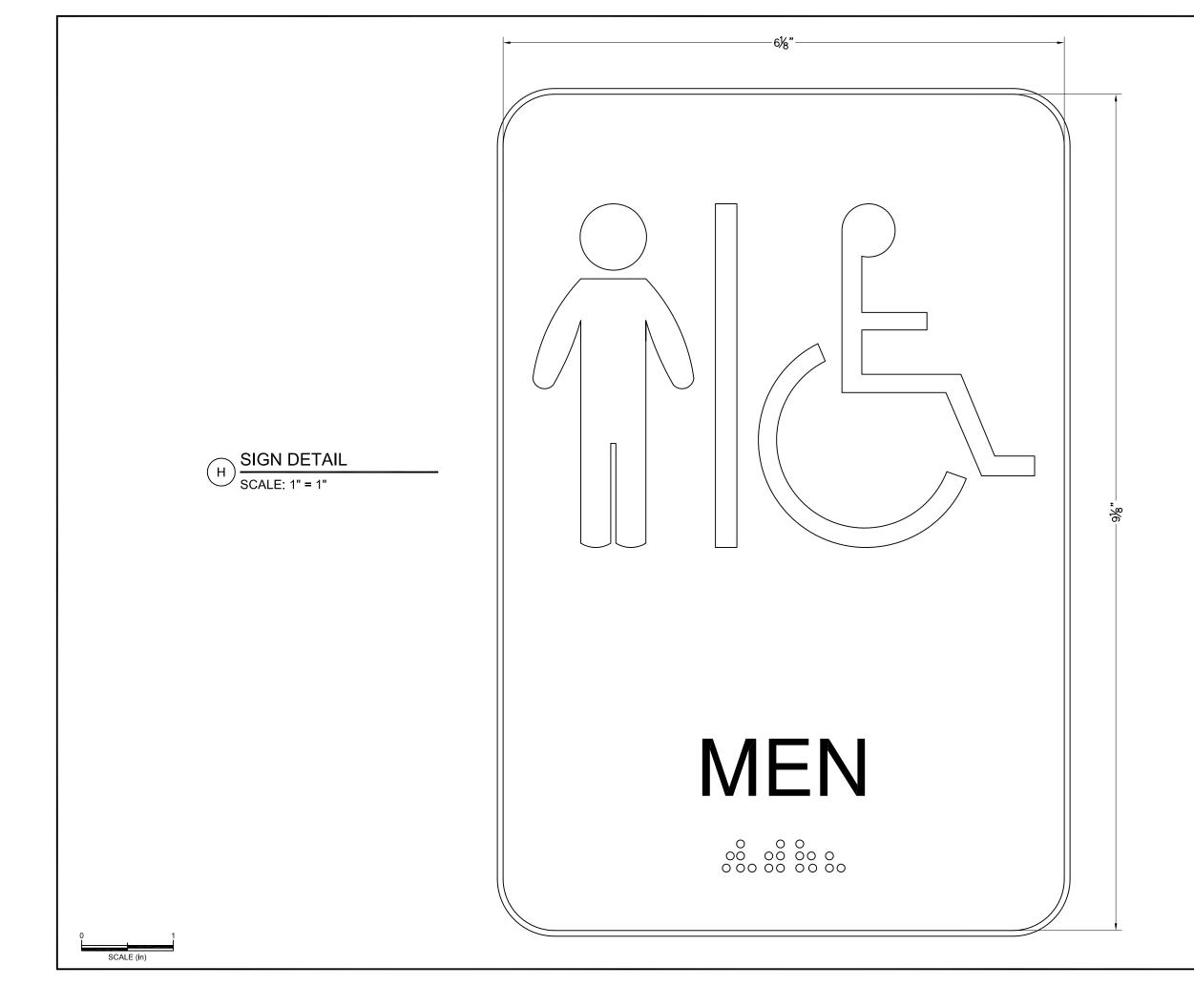


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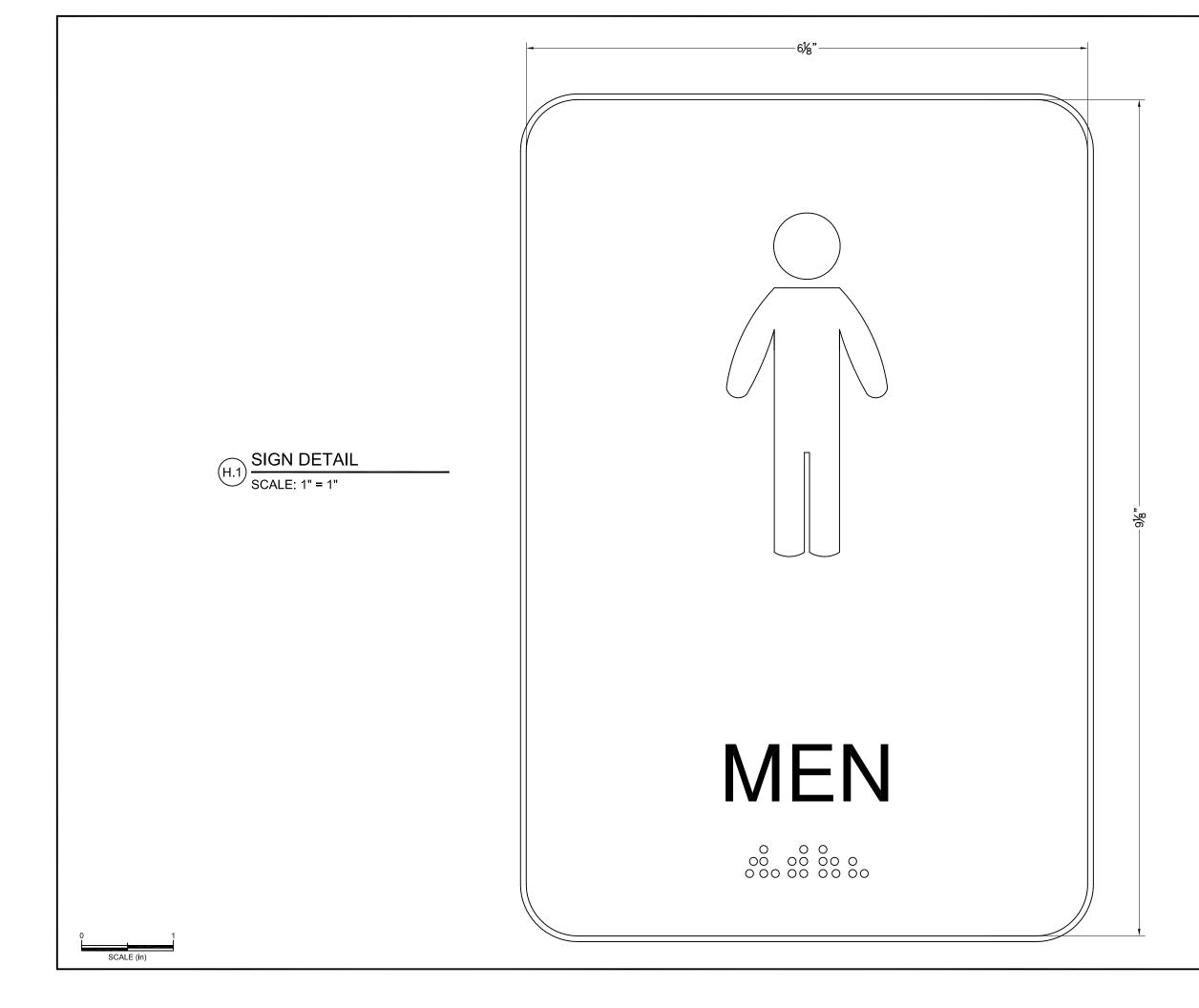
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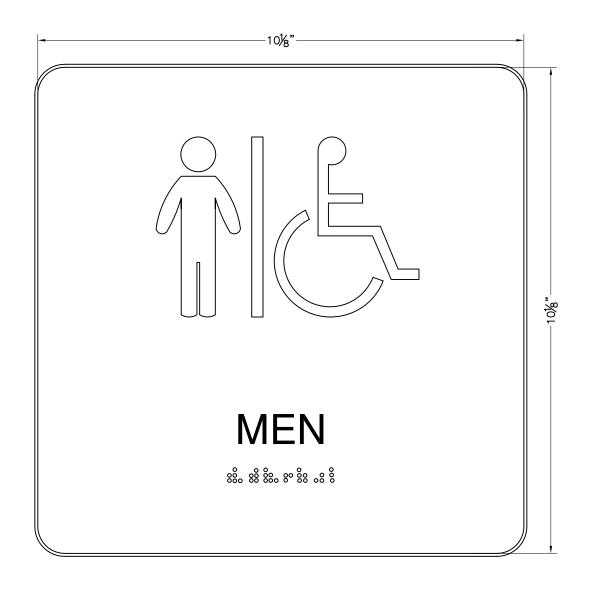
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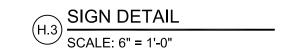


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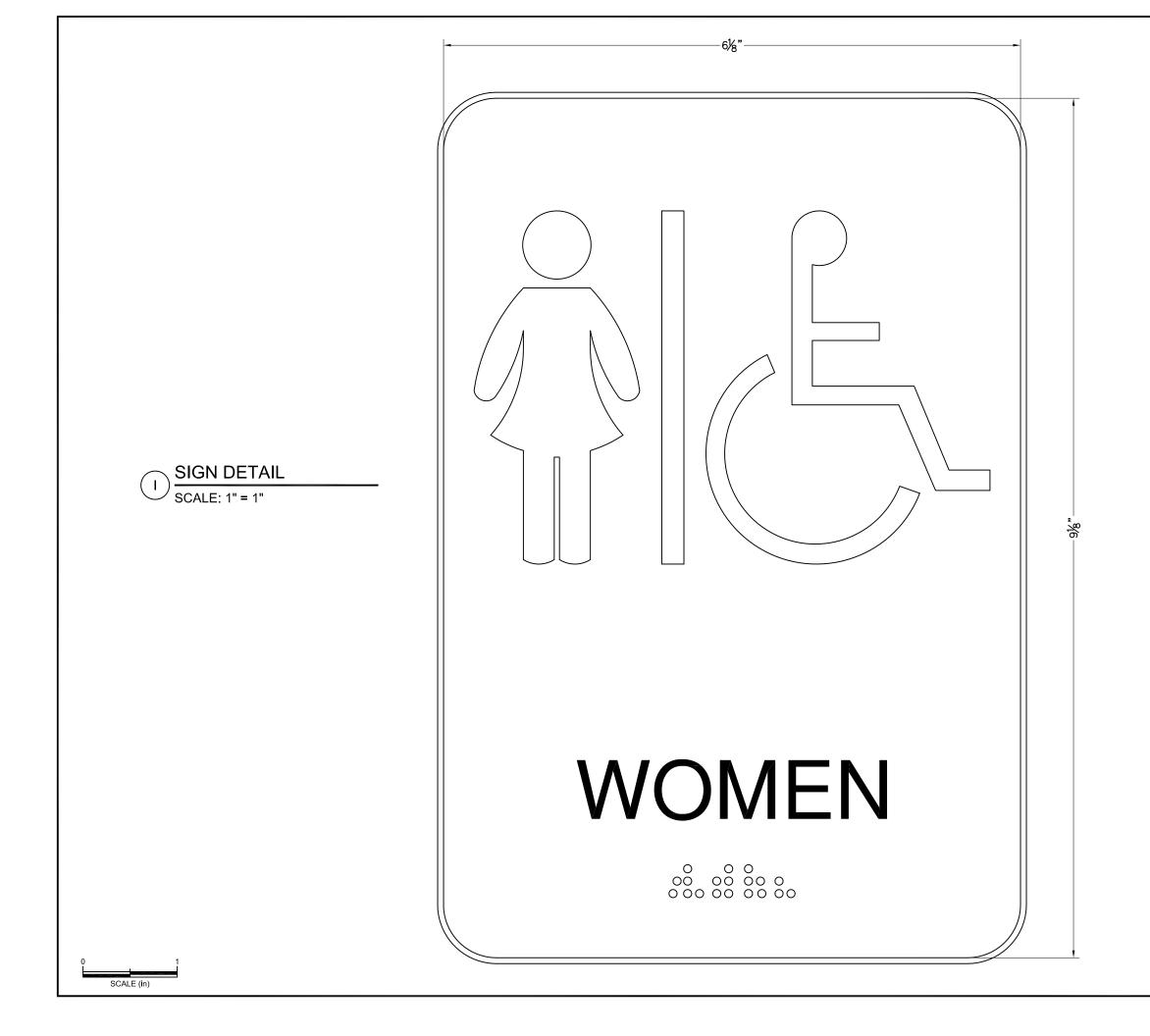
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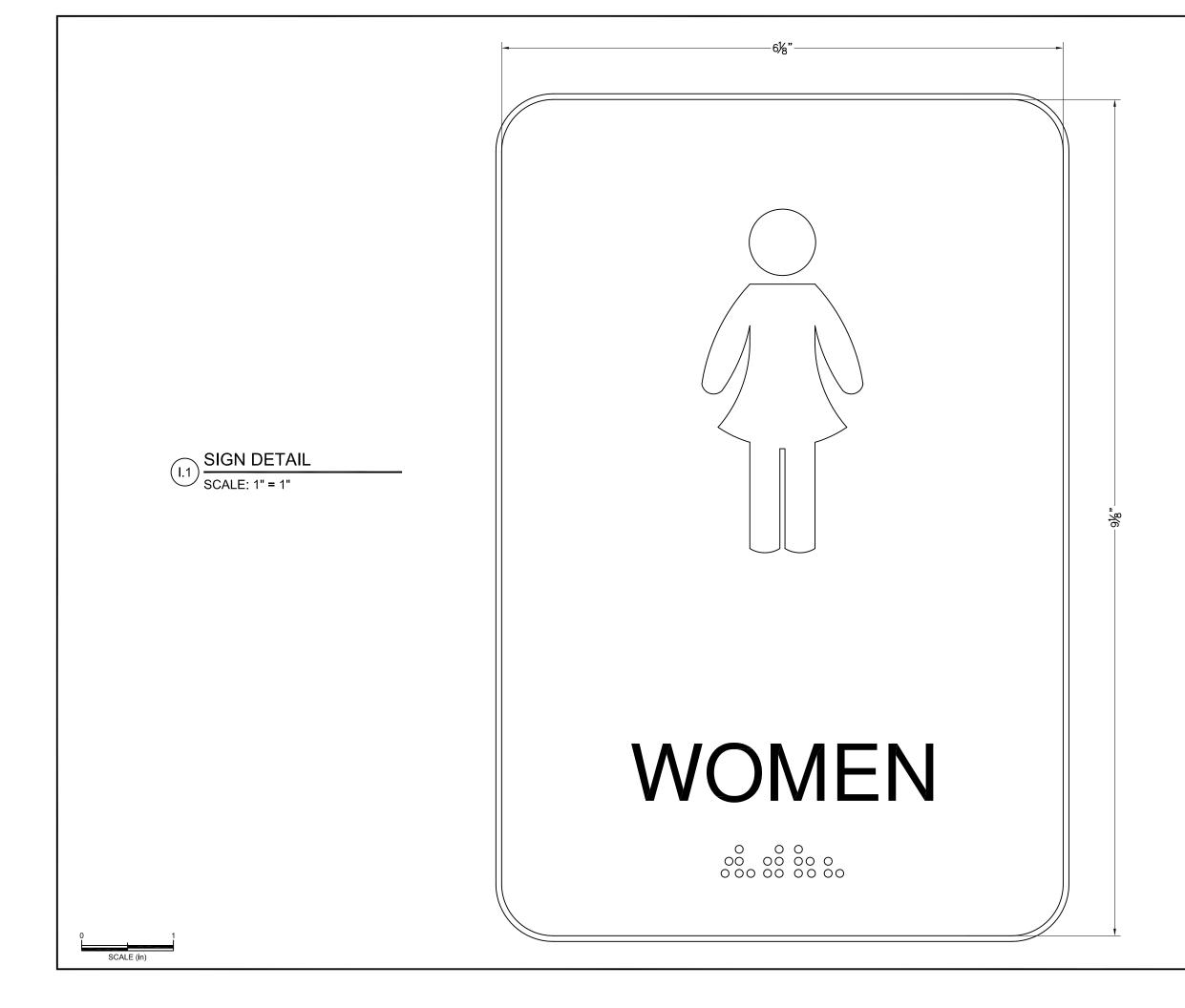




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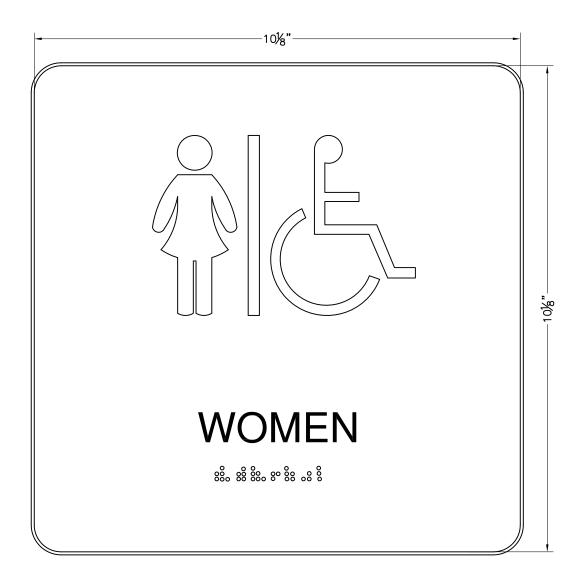
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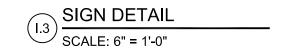


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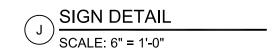






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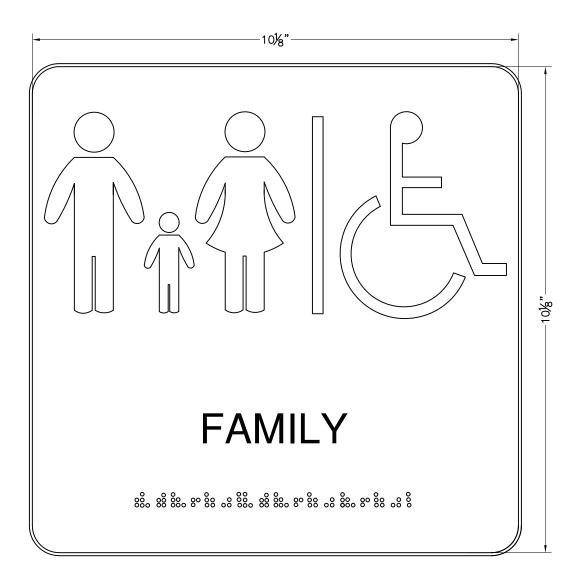
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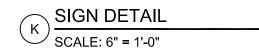


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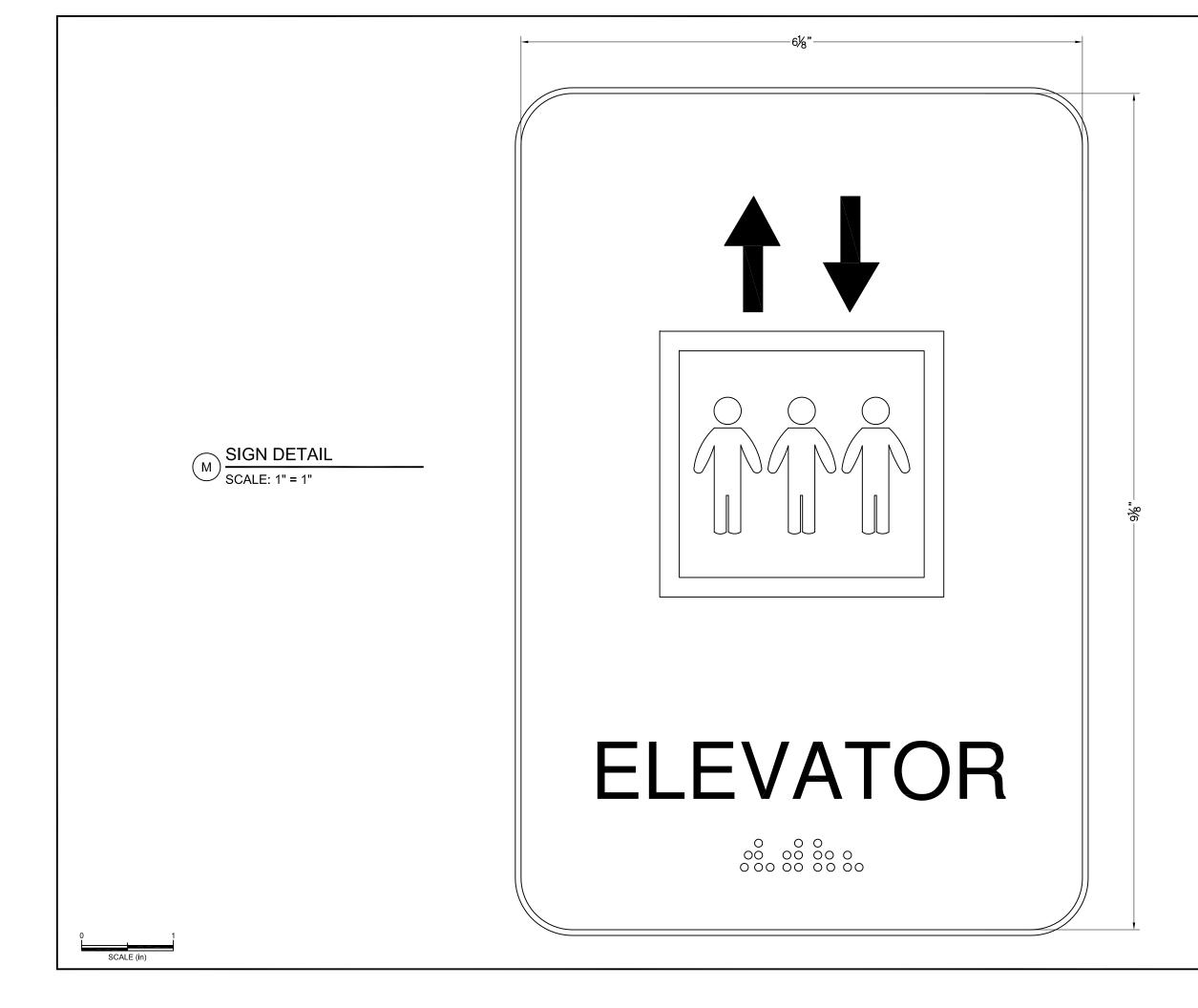
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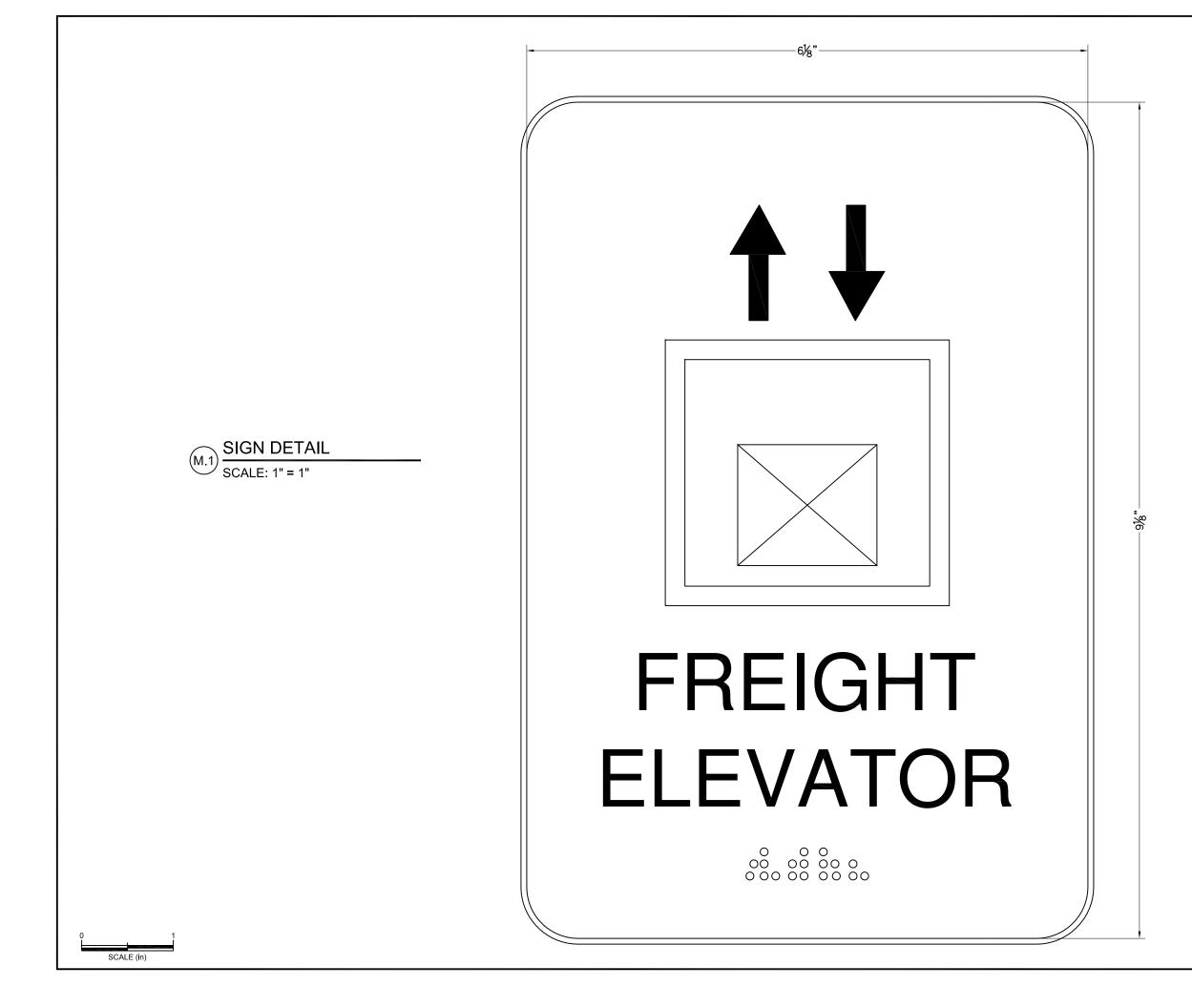


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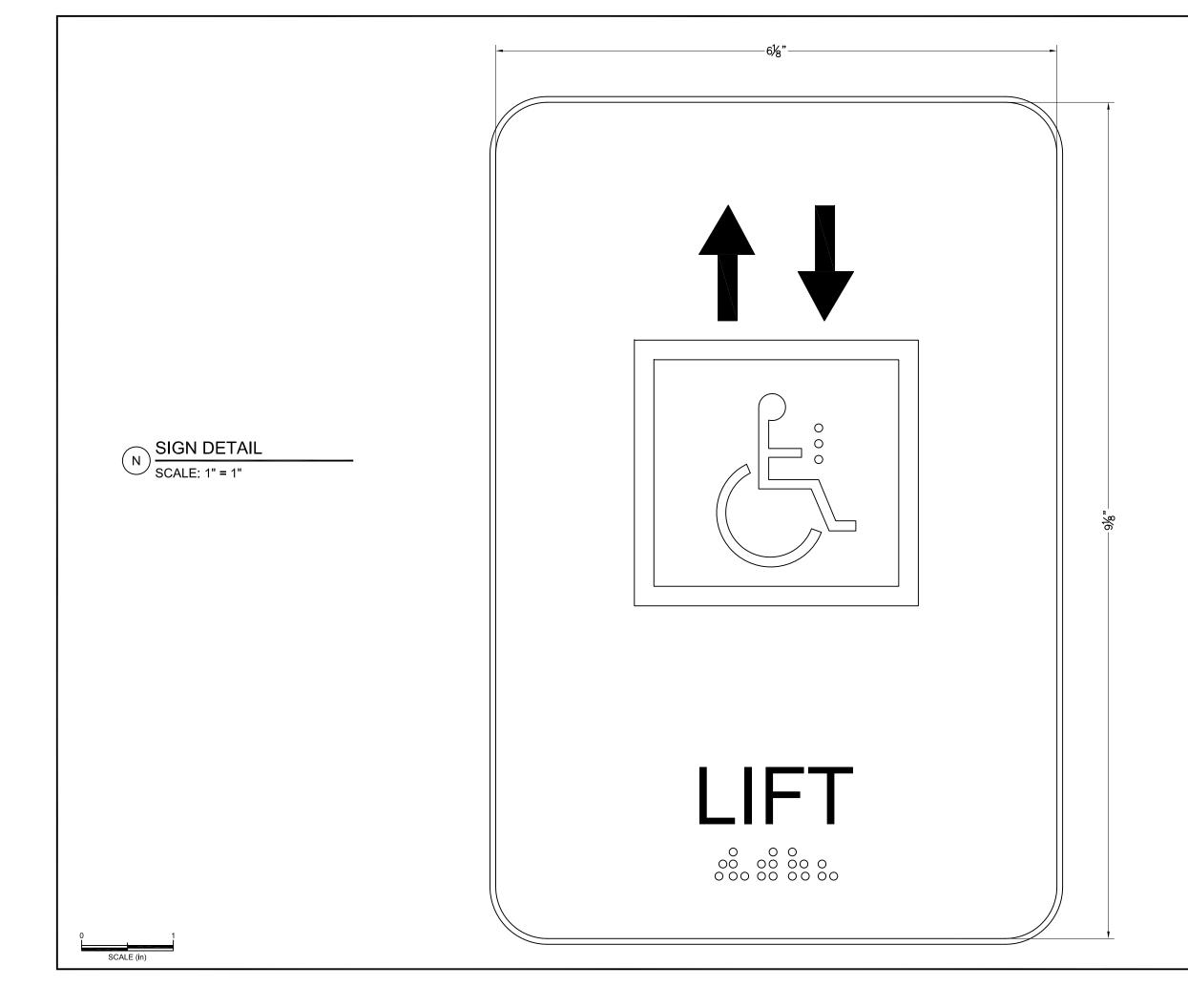




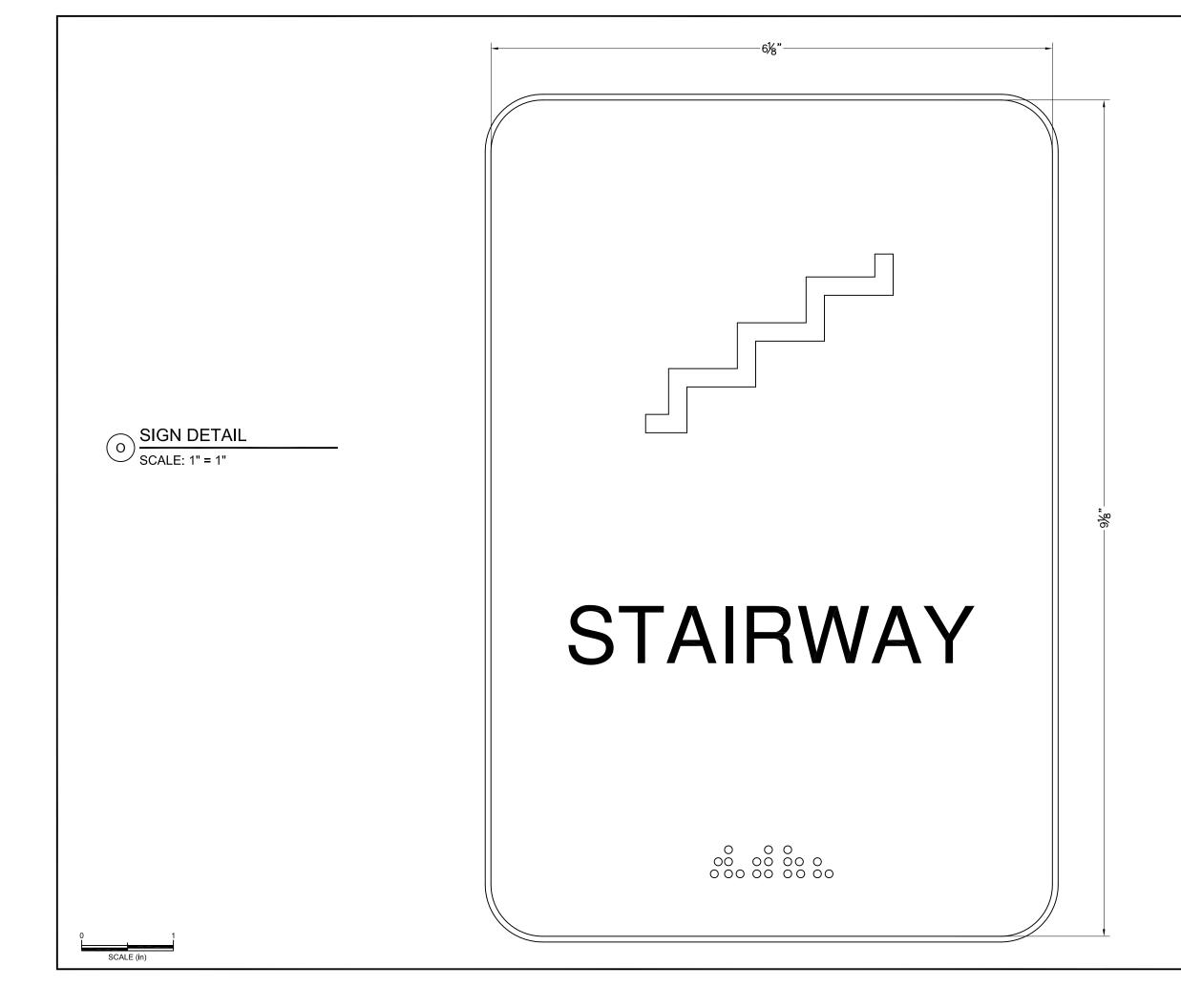
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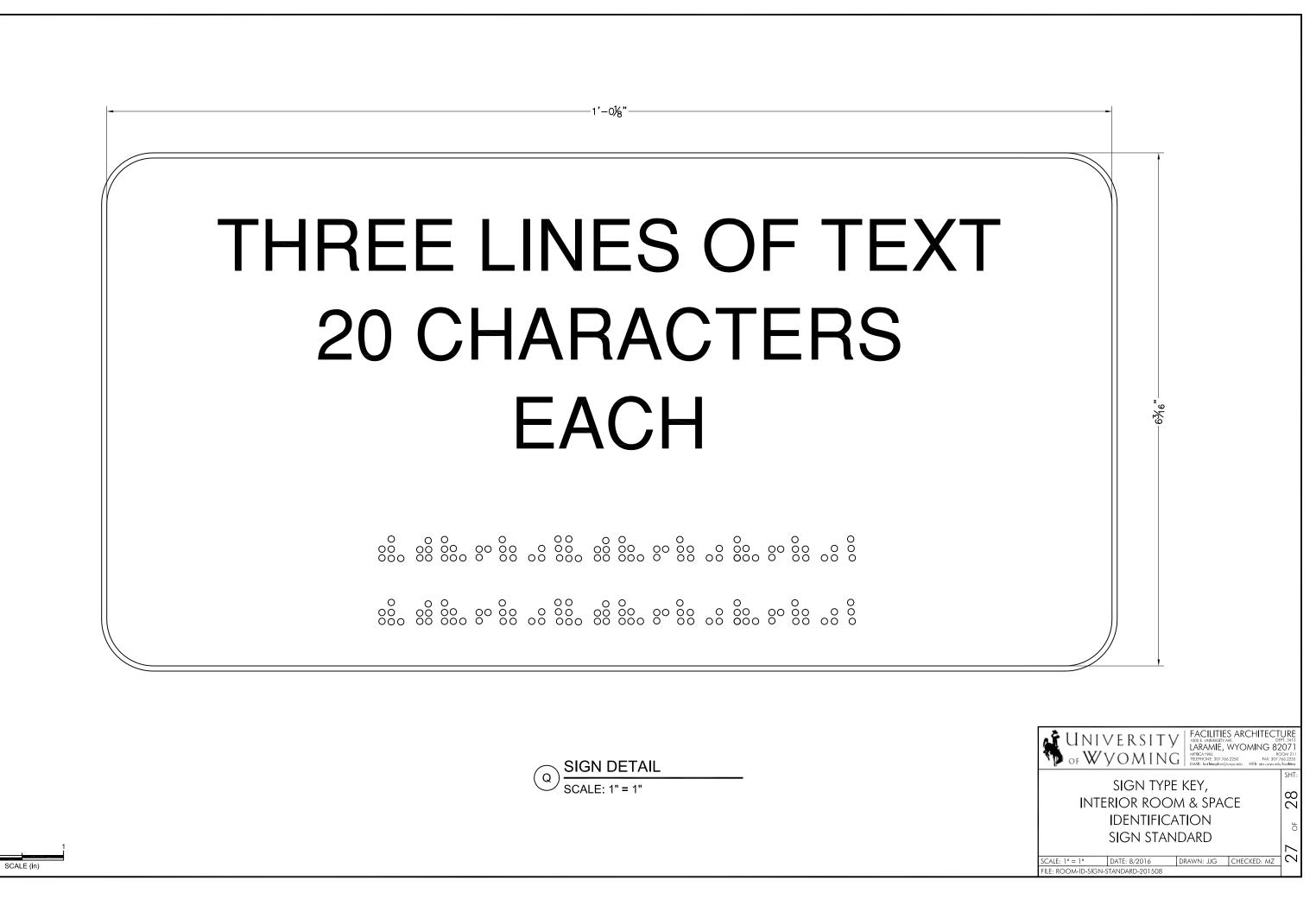
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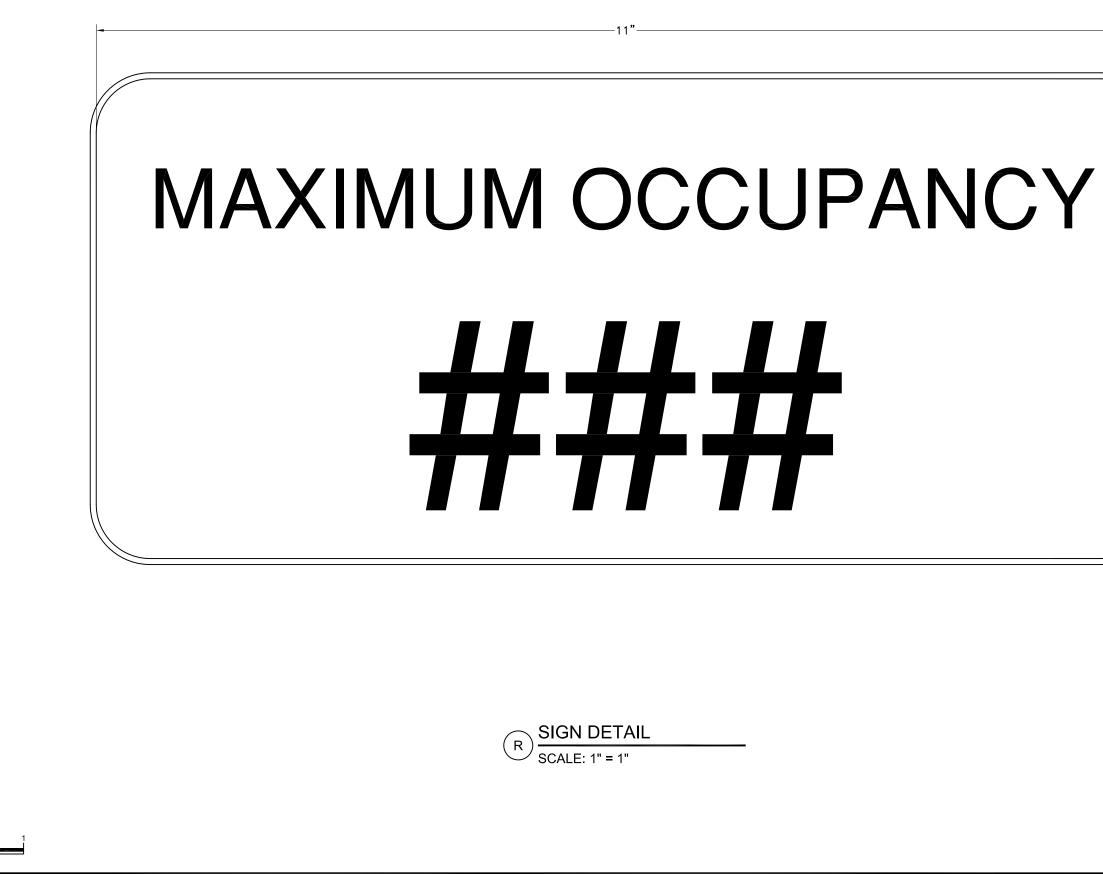


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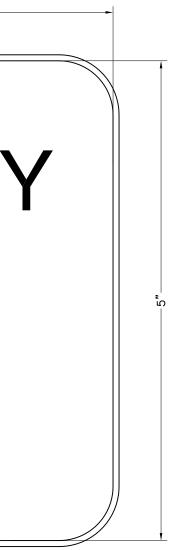


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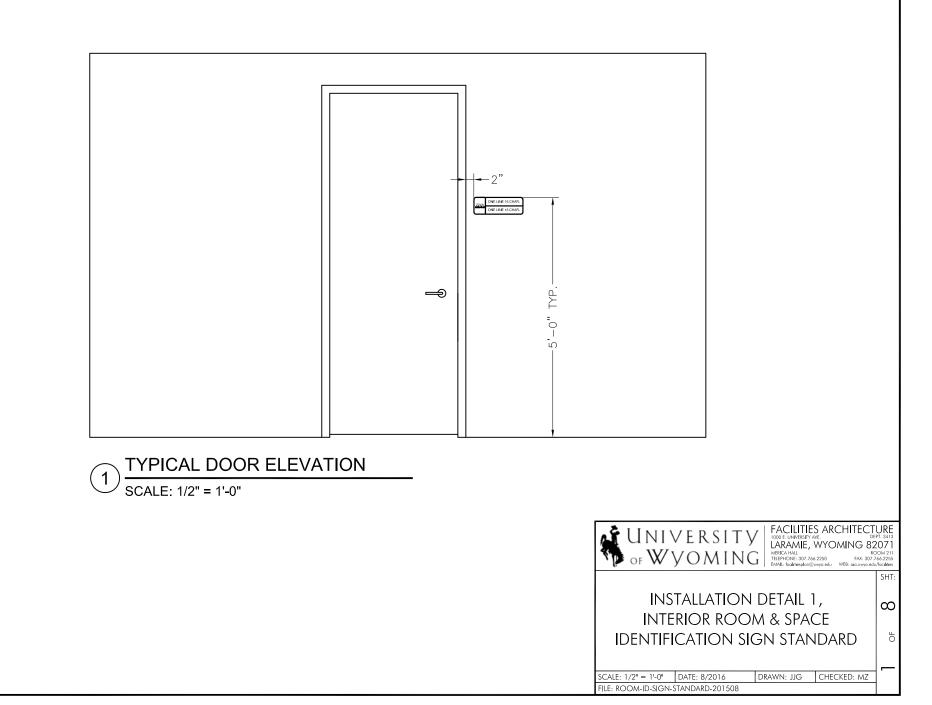


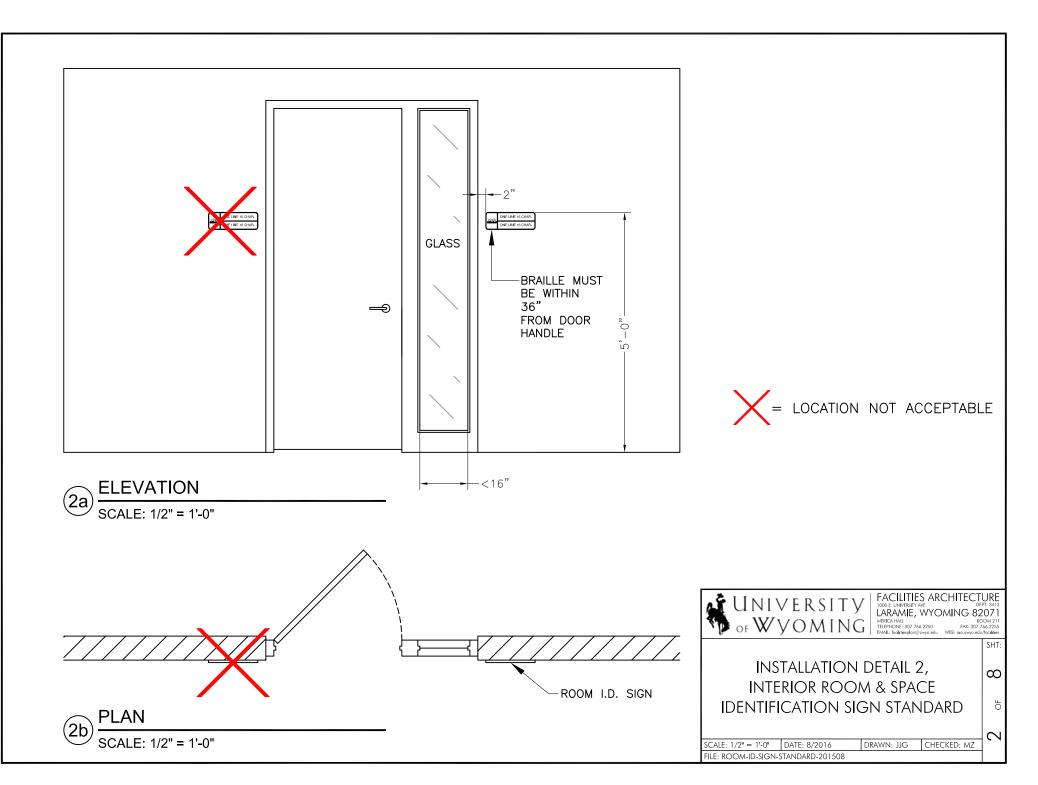
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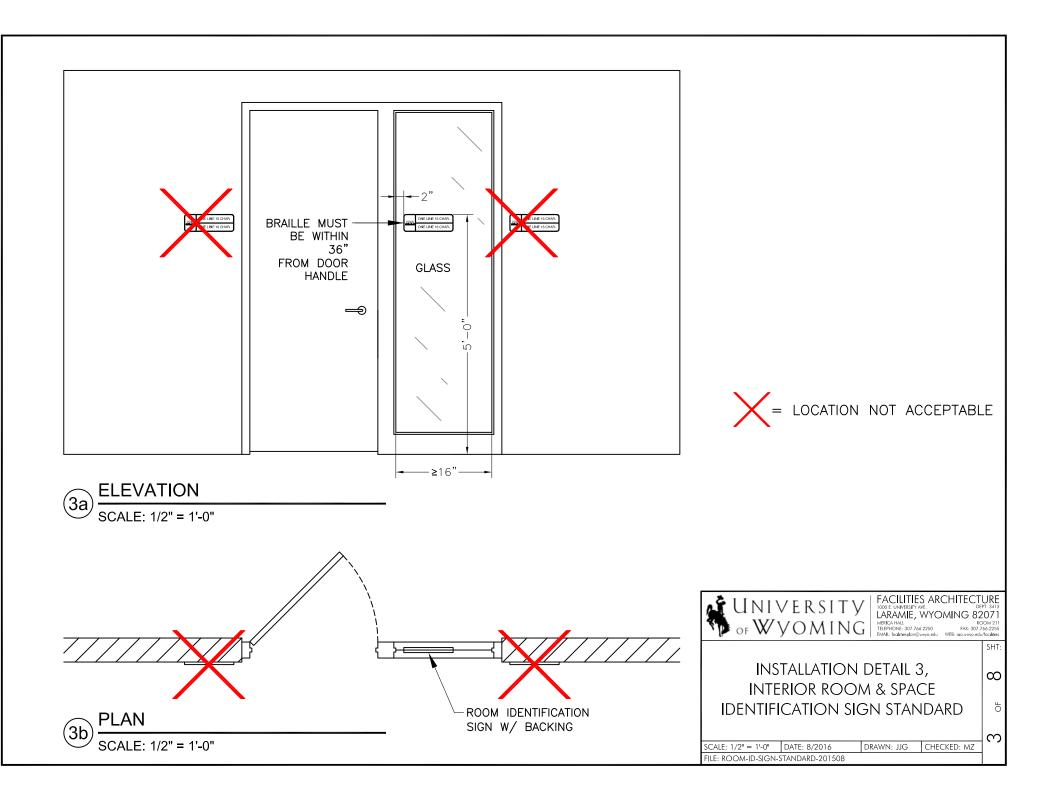


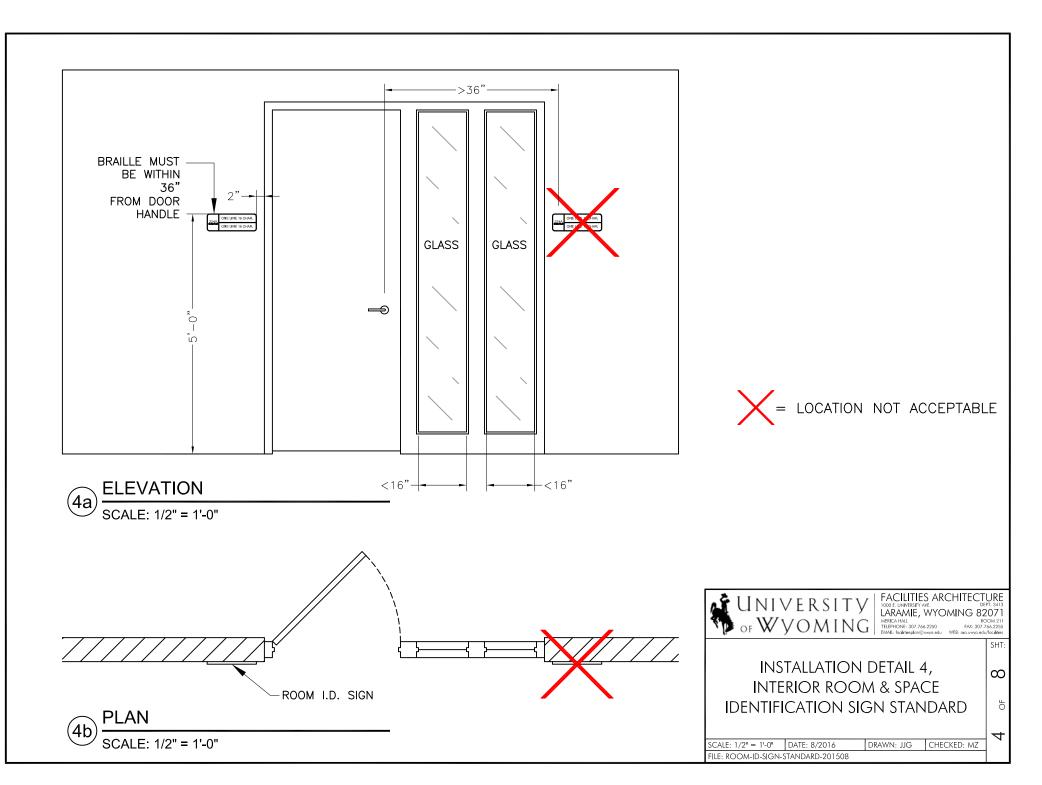


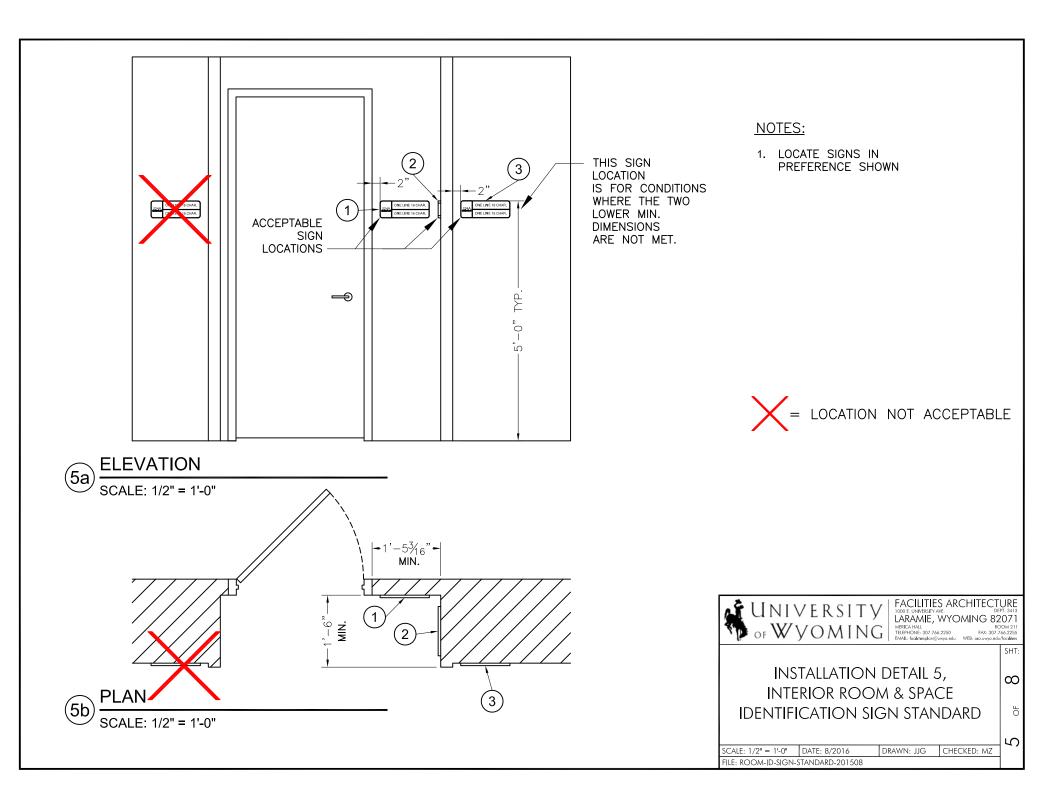
Installation Details

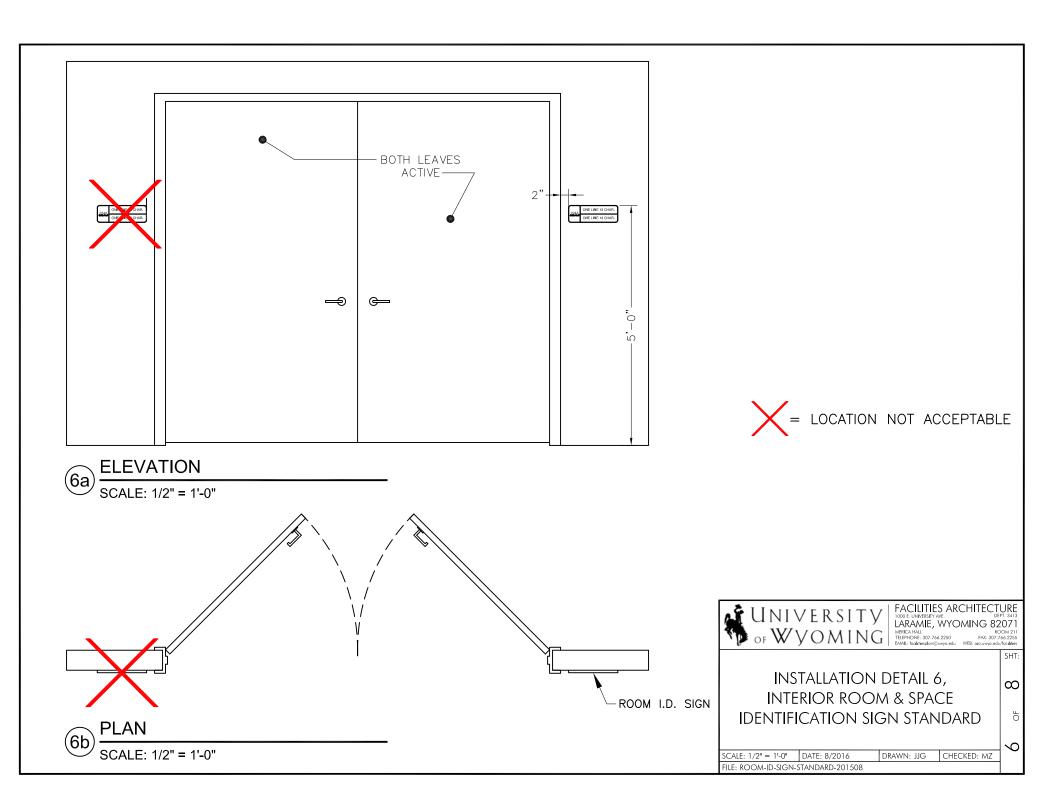


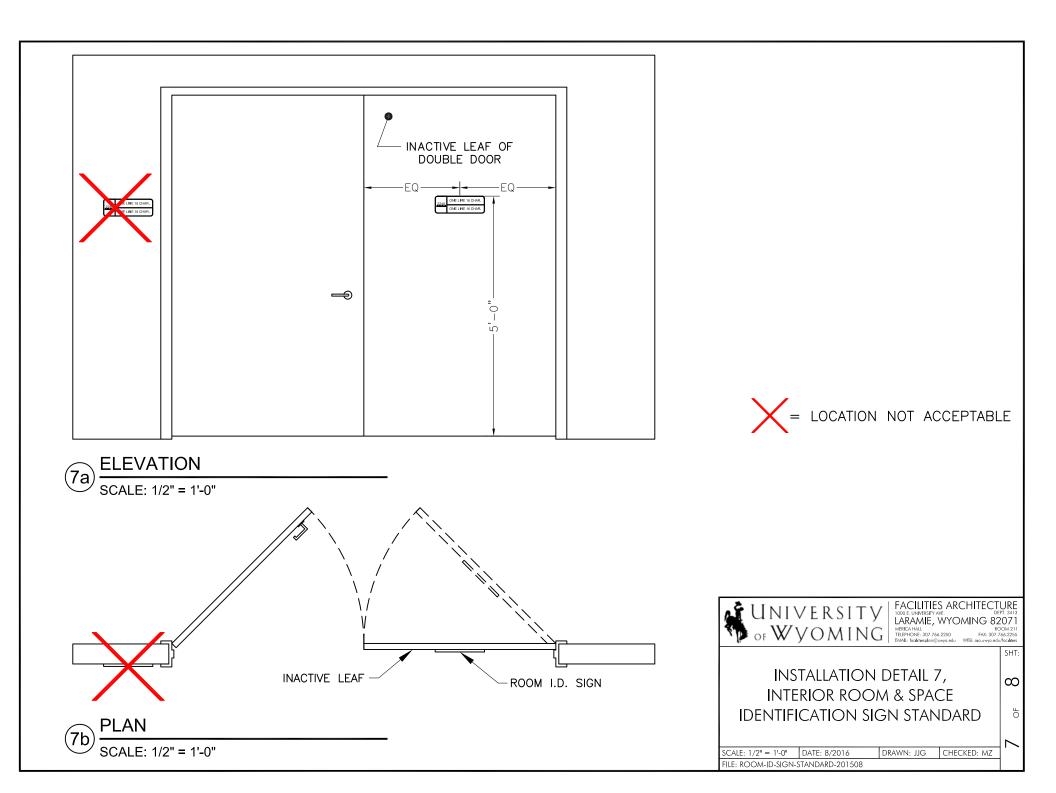


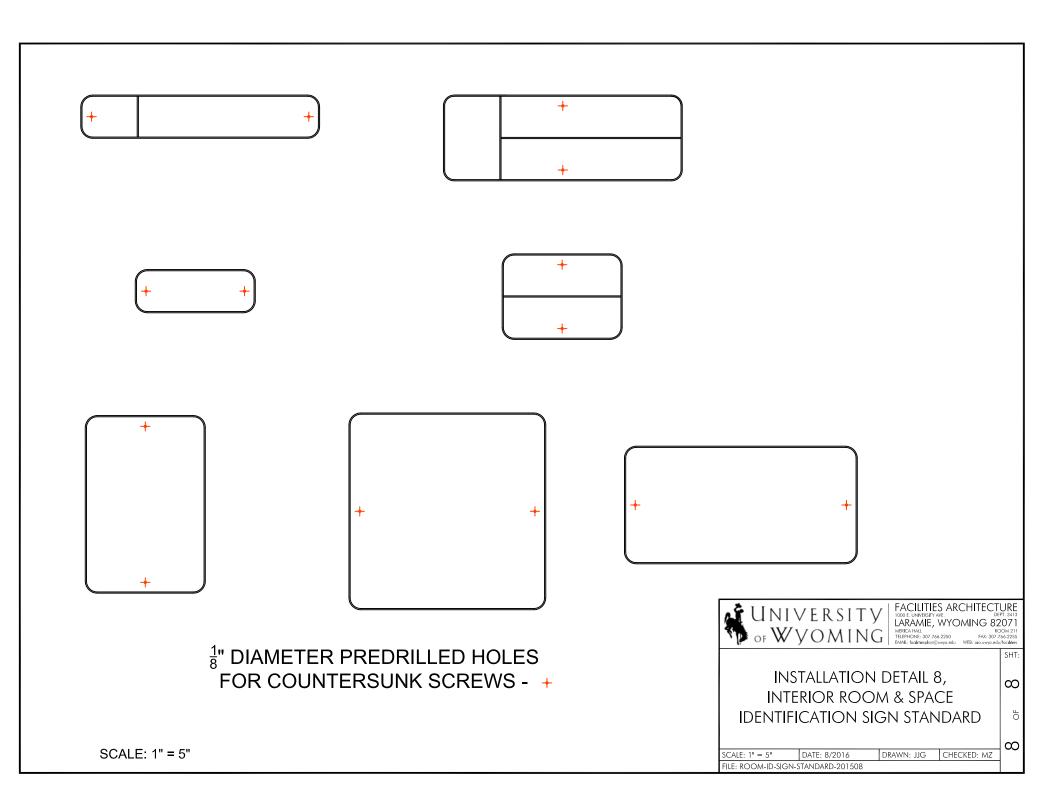












Excerpts from the 2010 ADA Standards for Accessible Design

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.

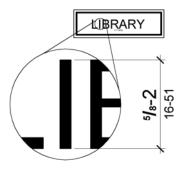


Figure 703.2.5 Height of Raised Characters

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 base of the cross sections, and 1/8 inch (3.2 mm) minimum and 4 times the raised *character* stroke width maximum at the base 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.

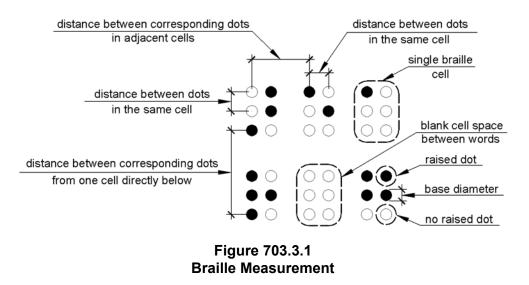
703.3 Braille. Braille shall be contracted (Grade 2) and shall comply with 703.3 and 703.4.

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.

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)

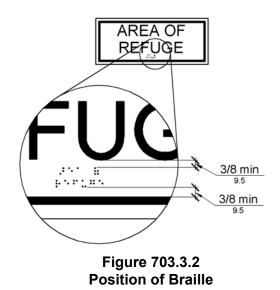
Table 703.3.1 Braille Dimensions

1. Measured center to center.



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.



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.

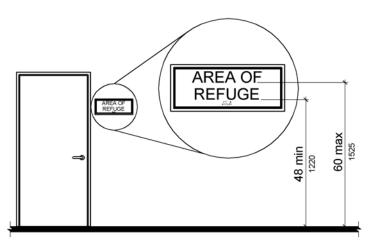


Figure 703.4.1 Height of Tactile Characters Above Finish Floor or Ground

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 leafs, 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.

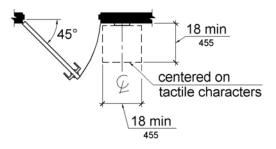


Figure 703.4.2 Location of Tactile Signs at Doors

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".

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)

Table 703.5.5 Visual Characte	er Height
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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.

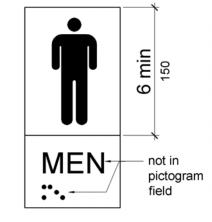


Figure 703.6.1 Pictogram Field

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.

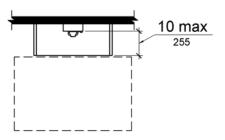


Figure 704.2.1.1 Parallel Approach to Telephone