

**THE UNIVERSITY OF NEW MEXICO  
DEPARTMENT OF PLANNING, DESIGN  
& CONSTRUCTION**

**INTERIOR SIGNAGE STANDARDS**

**AUGUST 2018**

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## **POLICY**

### **Overview**

Distinguishing the UNM environment from those of its competitors, in New Mexico and nationally, extending the UNM Brand Standard from print-into the built environment, its buildings, roadways and boundaries, and establishing UNM as an institution of innovation and safety by considering new technologies for accessibility, is our commitment.

The University of New Mexico strives to create and maintain a safe, secure, attractive, accessible, and functional campus environment. UNM Planning, Design & Construction, PDC, is responsible for maintaining the Interior Signage Standards, ISS, for campus signage. One part of upholding these standards is to ensure the campus maintains consistency across the range of needs and facilities of UNM and its staff.

Adoption of these Standards further supports the UNM Goals:

- Become a Destination University
- Prepare Lobos for Lifelong Success
- Promote Institutional Citizenship & Inclusive Excellence
- Enhance Health & Health Equity
- Advance Discovery & Innovation
- Insure Financial Integrity & Strength
- Advance & Accelerate Economic Development

### **Policy**

All signage, temporary and permanent, affixed to any UNM owned or leased facility, structure, landscape feature or freestanding element, shall be approved by UNM Planning, Design & Construction, PDC, Campus Architect office or designated staff, on behalf of the Office of the UNM Chief Operating Officer. Signage, temporary and permanent, shall adhere to the UNM Interior Signage Standard, ISS, in all aspects, without deviation unless otherwise approved by UNM PDC or UNM COO.

UNM Physical Plant Department, PPD, is responsible for implementation of signage program components for which they have technical capability to manufacture in compliance with ISS, and will work collaboratively with PDC to maintain and strictly uphold the ISS.

Temporary signage, including but not limited to, posters, notices, schedules, banners, portable boards, flyers, located in all public areas, and for the use of identifying or providing direction to a destination or path, shall be reviewed and approved by PDC, Campus Architect or designated staff.

**Usage**

The ISS are provided for use by UNM Staff, project Architects, General Contractors and Sign Fabricators involved in new construction and renovation projects. Existing UNM buildings will be evaluated ongoing, for upgrade of signage to match the ISS.

## Section A Introduction

### PART I ABOUT THE STANDARDS

The ISS encompass the entirety of The University of New Mexico – campuses, facilities and real estate, including UNM Athletics, and all branch and satellite campuses. The ISS strengthen wayfinding and access for campus users, enhance and extend the UNM Identity and Brand Experience, and reinforce UNM accessibility initiatives. The purpose of the UNM ISS is to provide The University of New Mexico with compulsory standards which are fundamentally: user-centered; simple in design & construction; logical & effective; and streamline internal management processes, resulting in wide-spread, comprehensive, cost efficiencies.

The impetus for drafting the ISS began from an analysis of UNM facilities, with regard to accessibility and compliance. The primary barriers prohibiting connectivity, easy access and orientation in the built environment at UNM were attributed to three major factors:

1. Lack of a solid, consistent, and well conceived information system.
2. Haphazard and adhoc signage implementation.
3. Lack of understanding of the importance and significance of wayfinding (accessibility), signage and the overall spatial brand experience for UNM's customers and the community.

The result of any *one* of these three factors not being considered as part of a *comprehensive orientation plan*, renders even the best sign program ineffective.

*Signage is more than just a door sign or letters stuck on a wall.*

When signage is integrated into a built environment as a considered and thoughtful network of information and graphic elements, it becomes a seamless and highly effective communication and brand experience framework. Signage assists users in finding their way, while providing much needed and required access equality.

#### **Less is More**

#### ***If One Sign is Good, Three Signs are Better!***

A common approach and practice by institutions is to add signs when one sign isn't working, the notion that if one sign is good, two or three signs is even better. More words, more names, more color, decorative inserts, more decoration, pretty symbols and more materials, on more plaques—these things ultimately compromise the integrity and effectiveness of a wayfinding program. The phrase, “Less is More,” is never more true than with wayfinding and signage programs.

***Less Signage = Less Confusion = More Safety***

## Section A Introduction

### PART I ABOUT THE STANDARDS

Implementing a comprehensive wayfinding program requires reducing the quantity of signs in a building or environment, so that the signs are more efficient: have the appropriate, relevant messages, and are placed at key decision-making locations.

#### ***First-Time Users***

As human beings, we are adept at adapting to our environment. As we grow older, develop disabilities, and/or enter unfamiliar environments, our ability to adapt becomes more challenged. As UNM staff, in most cases we are intimately familiar with the UNM environment or the building within which we reside, and in these cases, it is often easy to assume other people, even first-time users are familiar as well. With a wayfinding program, it is of paramount importance to develop signage program: messages and information for users who have the least cognitive, visual and motor ability.

As an institution of higher learning, UNM cannot accept the minimum standard of compliance and performance, instead, updating the interior signage within a facility provides an opportunity to address the real needs of users of all abilities-visible and invisible. To this end, the ISS, the design of the interior signage system, is intended to enhance access and ease-of-use.

#### ***Compliance***

The ISS have been developed in response to mandatory requirements by the Americans with Disabilities Act, 2010 *Standards for Accessible Design*, and American National Standards Institute, ANSI, requirements and guidelines.

The US Department of Justice published revised regulations in 2010, which include the Americans with Disabilities Act, *Standards for Accessible Design*. As of March 15, 2012 these standards became mandatory. It is understood adherence to and compliance with the Americans with Disabilities Act, Chapter 7: 701, 703 is mandatory. All sign fabricators are directly responsible for insuring compliance of their final product in all aspects and without deviation or interpretation unless expressly and explicitly directed in writing by the University of New Mexico.

## Section B Guiding Principles

### PART I ABOUT THE STANDARDS

*The following guiding principles were established for these Interior Signage Standards development process.*

#### **Compliant**

Fully compliant with current Americans with Disabilities Act *Standards for Accessible Design* ADASAD, International Building Code IBC, and all applicable federal, state, city and UNM standards and regulations.

#### **Consistent**

Consistent with UNM Marketing & Communications, UCAM, Identity Standards. Consistent in format, graphics, information, and design across all UNM facilities.

#### **Legible**

Following federal guidelines & *best practices* for legibility, viewing distance, sign placement/location and sign contrast.

#### **Flexible**

Changeable program for diverse functional needs of UNM: future construction & campus configurations.

#### **Updateable**

Easily obtained materials and techniques for updating, consistent with the ISS.

#### **Cost Efficient**

Utilizing design, fabrication & installation techniques which represent efficient, responsible use of materials, maximizing value over time.

#### **Optimization of Materials**

Fabrication to optimize materials utilizing manufactured, off-the-shelf components, where possible, finishes and existing materials, to ensure consistency.

#### **Sustainable**

Consistent with UNM Sustainability policies.

#### **User-Centered**

*Visitor & First-Time User-Centric* messaging, which is logical, cogent and easily comprehended outside the UNM community.

## Section C What is Wayfinding?

### PART I ABOUT THE STANDARDS

#### ***What is Wayfinding?***

*“People associate with spatial relationships,  
which establish an ‘Image of the Environment.’”*

–Kevin Lynch

Wayfinding is defined as the orderly structuring of information and graphics, enabling people to comfortably and successfully navigate the built environment. Functionally, wayfinding means reaching a destination with ease within an acceptable amount of time. Wayfinding also establishes an experiential relationship with architectural, urban and natural landscapes, and is essential as part of a modern campus environment, impacting all users of UNM and the surrounding community. (excerpted UNM.edu, 2008)

Wayfinding is the *tangible, perceptible and intuitive interpretation* of an environment into which spatial cues are implemented to *orient* and *guide* a user. Wayfinding affects users emotions and attitudes about the University, and is more than a navigational tool, it is a way to market a specific areas resources, alter negative perceptions, evoke a sense of history, character and pride. Finally, and most importantly wayfinding encourages accessibility and public safety, focusing on all modes of transportation, by foot, bicycle and automobile, reducing accidents and supporting University loss prevention strategies. As stated in the UNM Master Plan Update 2009,

***“wayfinding is essential for the success of the University.”***

Wayfinding is not limited to just signs and graphic devices, but a full spectrum of sensory cues that provide an intuitive sense of orientation and establish a unified sense of place, enhancing the human experience.

The fundamental objective in developing a successful wayfinding project is creating an accessible, understandable and sometimes immersive environment.

## Section D Program Premise

### PART I ABOUT THE STANDARDS

#### ***Wayfinding & Signage is Serious Business***

Wayfinding is not Signage & Signage is not Decoration.

It is important wayfinding and signage be given the same consideration as other architectural features and fixtures and ADA considerations within a building, and the built environment, and when possible, be planned at the onset of a construction project.

When wayfinding is considered as part of the initial programming and schematic design of a building project, it is more effective and integrated, leading to greater ease in navigation and orientation. After the wayfinding strategy has been developed, the execution of that strategy, is articulated using signage and other graphic devices.

The primary purpose of signage is for safety, security & ease-of-use.

As such, every element: symbol, graphic, letter, word and color of a sign layout must be meticulously considered and integrated into a larger communication, information, marketing, branding and facilities framework, and evaluated as to its effectiveness.

*Wayfinding provides life-safety information, prohibitive and regulatory information, route and access information – and must always be treated with the top priority on user-ability, compliance, maximum legibility, and access.* In the most optimum situation, signage can only hope to reach some users, and if executed without consideration for the overall information and user-strategy, it will reach none of the users.

#### **Form Follows Function**

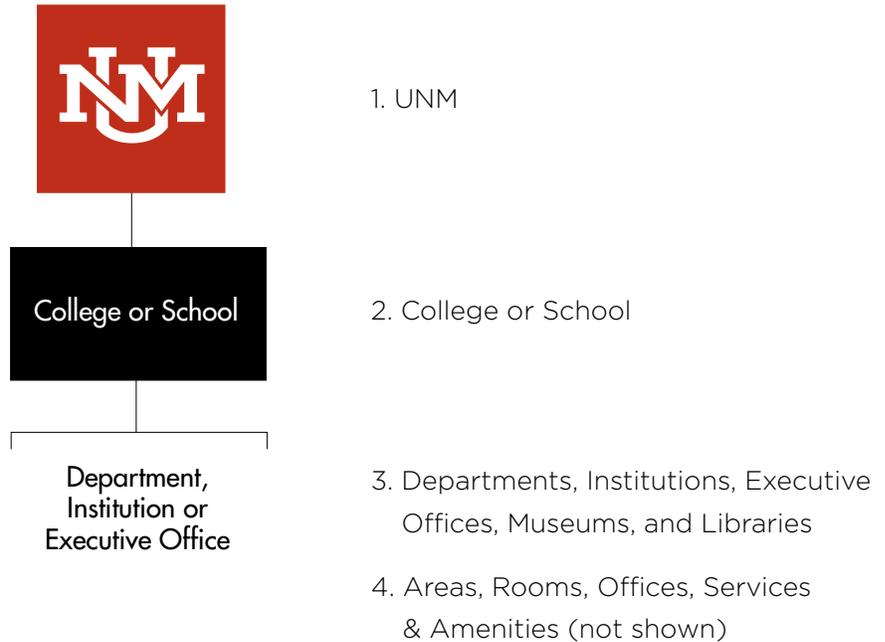
The design principle, “form follows function” is associated with 20th century modern architect, Louis Sullivan, 1896. This principle suggests that the shape or form of an object be based, primarily, upon its intended function or purpose—this precept is at the foundation of the design of the UNM ISS.

#### **Naming Convention**

An information strategy is the classification, hierarchy and methodology for which information is presented or disseminated to users. *Naming convention* refers to the system of principles by which words are selected and used. The principles of naming vary from the relatively informal conventions of everyday speech to the internationally agreed principles, rules and recommendations that govern the formation and use of terms. A naming convention is based on logic and consistency, it is not arbitrary, nor does it deviate from its own system.

## Section E Hierarchy of Information

### PART I ABOUT THE STANDARDS



### ***Hierarchy of Information for UNM***

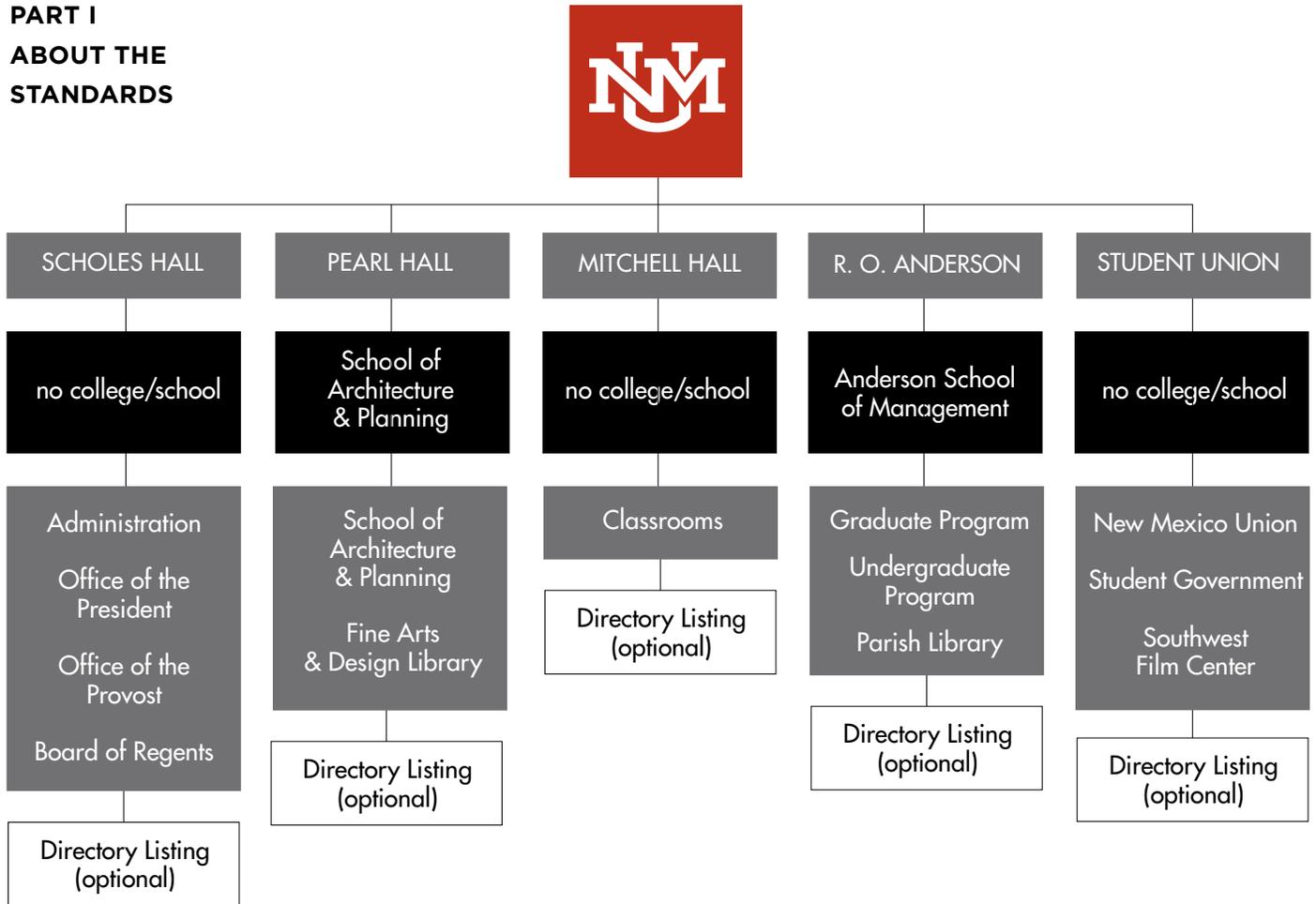
An Hierarchy of Information is a system, based upon an organizational structure, for the way words and messages are organized, presented and referenced. As it relates to the ISS and the larger UNM *Wayfinding & Signage Master Plan*, the simple organizational structure above illustrates the basic UNM Hierarchy of Information, and should be followed as the fundamental hierarchy for identification and presentation of information within the signage program.

The premise for this information hierarchy dates back to early years of UNM, when the university was comprised of the College of Arts & Sciences and School of Engineering, who, through friendly competition, sought prominence.

Over the years, the recognition of the Colleges and Schools, has diminished somewhat by the emphasis on specific departments, within the Colleges and Schools. The hierarchy presented, reestablishes Colleges and Schools within the UNM organizational structure, and this hierarchy should be consistently implemented for all aspects of communication within UNM.

## Section E Hierarchy of Information

### PART I ABOUT THE STANDARDS



## Section F Sign Content Regulations

### PART I ABOUT THE STANDARDS

#### **Form & Formatting**

##### Building, College, Department, Office & Room Naming

For ease of access, wayfinding and fabrication, the length of names presented on room signs are limited to 12-16 characters per line or as specifically outlined in Part III, Interior Signage System, Section D, Sign Details. Use of acronyms will be secondary to a room function or formal room name, where applicable. Honorific or donor names, unless part of the accepted cultural vernacular, or formal name, will be given a graphic treatment sole and separate from wayfinding information. Punctuation including . , ; ' " and () shall not be used on signs, or used only absolutely necessary, such as with Ph.D. when insisted upon by the Department. (not on Donor Signage)

#### **Sign Graphics**

The following shall be followed for compliance and to provide maximum legibility and accessibility.

- A. All signs shall have a minimum 70% reflectivity or contrast, between graphics/text and background during day/night, lit/unlit conditions consistent with ADA recommendation.
- B. All fonts shall comply in width/height and stroke/width ratios per ADA.
- C. Only the UNM logo(s) is permitted on signs, where applicable, no other company logos, brand graphics or illustrations are permitted.
- D. Directional Signs: Use only ***one arrow per direction***. Destinations should be listed based on closest proximity first, and in the directional order of: left, right, up.
- E. Upper & lower case shall be used for all wayfinding text.
- F. Only Gotham Bold in all caps shall be used for Building Name, Departments, Area and Interior Destinations when presented as display/larger format graphics/signage. The same information shall be presented as Upper & Lower Case Gotham Book font for Directional and Room Name signs.
- G. Use simple identification. No redundant or superfluous information.
- I. Directional signs: ***no sign shall contain more than five destinations***.
- J. Color Coding. Used to distinguish UNM Campus vs UNM Health Sciences, UNM Shuttle, and UNM Parking as required. Further color refinement may be required at a later date.
- K. Use of Smart Quotes vs Prime Marks. At no time shall smart quotes (apostrophes ['] and quotation marks[""]) serve as prime ['], feet, or double prime ["], inches, marks, eg., parking garage, etc.



D. Use one (1) arrow per cardinal direction destinations should be listed based on closest proximity first, and in the directional order of: left, right, up.

## Section F Sign Content Regulations

### PART I ABOUT THE STANDARDS

#### Naming Convention

These standards allow room numbering and wayfinding procedures to be applied consistently and uniformly to all University buildings. For UNM and ISS, the naming convention is the system of principles as it relates to the naming and identification of buildings, schools, colleges, departments, rooms, services, and amenities.

The naming convention includes:

- A. Function or Formal name for buildings for primary identification.
- B. Formal name for Schools, Colleges & Departments are secondary identification. Abandon acryonyms as identification unless universally accepted within campus vernacular.
- C. Eliminate redundant naming & information, ie. Student Union vs Student Union Building, Conference vs Conference Room, Bursar vs Bursar Office unless a part of the accepted vernacular.
- D. Consistent identification throughout all communication & visual media; rescript all verbal and written directions.
- E. Use correct grammar in all instances for destinations, ie., eliminate plural usage, instead use: Elevator; Restroom; Women; Men and never use the possessive: Womens Lockers, Janitors Closet.
- F. Abandon use of internal acronyms on signage.

#### Room Numbering

At its most fundamental, room numbering is intended for the user, not internal staff. However, room numbering also serves as a method for identifying each space within a building for planning, scheduling, and other operational purposes.

When to apply room numbering:

- A. New buildings.
- B. Renovations where the entire building or large portions of the building are being renovated.
- C. Smaller renovations where confusion may result from the renovation or where new rooms are created.
- D. Existing buildings in order to improve clarity and wayfinding.
- E. **All accessible spaces with a minimum 3' ceiling height are required to have a room number.** Each room shall have only one number, regardless of the number of doors used to access a room.
- F. Renovations and additions to existing buildings shall trigger a review of the existing room numbering system and a determination will be made by PDC to the extent to which renumbering is required.

## Section F Sign Content Regulations

### PART I ABOUT THE STANDARDS

#### General Standards

Room numbering must be comprised of a solid system, able to stand-up to virtually any programming scenarios. The ISS considers room numbering as part of the foundation of the larger UNM Wayfinding & Signage Program. The room numbering convention shall be followed as consistently as possible throughout all University facilities. Questions regarding room numbering should be directed to UNM PDC.

- A. Each room number must be unique, no duplicate numbers.
- B. Rooms shall be numbered in ascending order, in a continuous, clockwise direction, based on the primary: facility, department, suite and room entrance.
- C. **Race Track Plan:** at the main/ground level the lowest room number shall be assigned beginning to the left. Even numbers should be assigned on the right side (inside) of the corridor and odd numbers on the left side, (outside).
- D. **Double-Loaded Corridor Hallway:** assign even numbered rooms on the north and/or east side of corridor and odd numbered rooms on south and/or west side.
- E. **Vertical Stack:** to the greatest extent possible, rooms in similar locations on different floors shall have similar room numbers to allow for greater user orientation, floor to floor.
- F. Mezzanines will be numbered as a separate floor, ie., when the mezzanine exists between Floor 1 and the next whole floor, it will be numbered as Floor 2.

#### ***Specific Guidelines for Room Numbering***

- A. Rooms should be numbered in clockwise sequence beginning at main entrance, or as directed by UNM PPD.
- B. Rooms shall use a 3 or 4-digit, arabic numeral system.
  - 1. 3-Digit System
    - a. buildings not exceeding 99 rooms per floor, and for buildings with less than 9 floors.
    - b. first floor shall be numbered 100, second floor 200, third floor 300, etc. Basement floor shall be numbered B1, rooms located on basement floor shall be numbered B01-B99. Sub-basement floor, 2 levels below grade, shall be numbered SB2, additional sub-basement floors shall be numbered, SB3, SB4, etc.

## Section F Sign Content Regulations

### PART I ABOUT THE STANDARDS

2. 3 & 4 -Digit System
  - a. facilities exceeding 99 rooms per floor, and for buildings with more than 9 floors.
  - b. first floor will be numbered 100, second floor 200, tenth floor 1000.
3. 5-Digit System and/or facilities organized in wings.

Facilities with architecture incorporating wings and/or connected buildings, these facilities will be numbered based on these standards, and the specific requirements of the building.
4. Reserve Numbers: Room numbers may be skipped and/or reserved to accommodate future growth/renovations, especially when larger rooms may be subdivided into smaller rooms.

Sufficient room numbers shall be reserved for larger spaces to be divided into standard size office spaces.
5. Room Numbers vs. Door Numbers: Architectural/Engineering door numbers shall never be used as a room numbering system.
6. Department/Suite Numbering: Suite numbers shall be based on the location of a suite within the clockwise sequence of numbers.

When possible, it shall be assigned a room number ending in "0" or "5," to denote an honorific or major destination.
- C. A floor having the main entrance located at grade, shall be Floor or Level 1. Regardless of building architecture, logic and basic user perception dictates a building main entrance is located on the ground or first floor. Names for floors such as ground, main, etc., should be avoided.
- D. Floors below Floor 1 shall be designated as basement, B, and below basement, SB1, SB2, SB3, respectively.
- E. Rooms within rooms, including closets, shall be numbered by the respective suite/department number, in a clockwise order, plus an alphanumeric suffix, A - Z, including the use of "I" and "O," unless that room is designated by the Utility Numbering System. If a suite has more than 26 rooms, contact PDC for assistance in numbering the suite.
- F. Each cubicle shall have a distinct room number. Groups of cubicles within a designated area shall use the corresponding room number with alphanumeric suffix, identified in clockwise order.
- G. Larger capacity rooms: meeting, classrooms, auditoriums, theaters, etc, use 'honorific' room designator ending in '0' or '5'.
- H. Back of House, BOH, utility and regulatory rooms maintain specific, consistent identification separate and different from sequential room number system.

## Section F Sign Content Regulations

### PART I ABOUT THE STANDARDS

- I. All door signs shall have room numbers printed on signs per ADA, including restrooms per UNM PDC, which are for internal use only.
- J. For new construction, restrooms shall have only the designated gender or universal restroom sign, and not include the access symbol, as the symbol is not required when all restrooms within a facility are accessible. (see Section C Sign Details, Sign Type R4)

For buildings with both accessible and non-accessible restrooms, the access symbol identified in the ISS will be used per ADA standards. For non-accessible restrooms, a clear map shall be provided with direction to the nearest accessible restroom. (see Section C Sign Details, Sign Type R4)

#### K. Utility Numbering System: Back-of-House, Utility & Regulatory

The following numbering system is designed for all rooms, areas and corridors, designated by UNM PDC. The Utility Numbering System, translates as follows:

- first digit = floor, second digit = function e.g.,  
1R1 = first floor restroom and 2R1 = second floor restroom
- C = Hall, Corridor, Vestibule, Public Circulation
- E = Elevator
- J = Janitor, Custodian
- L = Lift
- M = Mechanical, Electrical, Fire Riser
- R = Restroom (restroom adjoining an office will be identified with an alpha numeric rather than R designation)
- S = Stair
- T = Telecom, Data
- W = Waste, Trash, Recycle
- V = Vertical Penetration, Shaft

- L. The text, "Thank you for respecting our tobacco free campus" and accompanied by the approved No Smoking symbol, shall be provided in all buildings using Sign Type G2 on every building project.

## Section G Accessibility

### PART I ABOUT THE STANDARDS

The Standards address considerations for people of all abilities, visible and invisible. With regard to disabilities, signage addresses the needs of those who have little to no visual acuity, low color acuity, as well as those with limited mobility, and the elderly. Those with low visual acuity, do not represent a single group, they represent a broad spectrum of perceptual abilities and needs.

#### ***Americans with Disabilities Act Standards for Accessible Design, ADASAD, 2010***

##### **Requirements for Interior Signage**

Following are the most significant ADA standards impacting the UNM Signage Program.

- A. The most significant change to the ADASAD with regard to room signs is the inclusion of 'equivalent facilitation.' Equivalent facilitation considers users of all levels of visual acuity: sighted, low vision, tactile and braille readers. This revision to the regulations allows for the **visual text to be presented on a room sign alongside tactile and braille text**, providing for both sighted and low vision users. The addition of visual text allows for greater legibility, design flexibility, as well as, and most significantly, for tactile lettering to be smaller, .5" in height, and non-contrasting to the background, 'invisible' or matching the background, similar to the braille treatment.
- B. All permanent rooms must have a sign containing the room name in tactile & braille. An office is an example of a non-permanent room and virtually all other rooms are considered permanent. This requirement has existed since the 1994 ADAAG.

*Room Designation Advisory 216.2 Designations.*

*Section 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: interior signs labeling restrooms, room and floor numbers and room names. Tactile text descriptors are required for pictograms that are provided to label or identify a permanent room or space. Pictograms providing information about a room or space, such as "no smoking," occupant logos, and the International Symbol of Accessibility, do not require text descriptors.*

- C. At no time should the lettering on a sign be condensed, or the type size altered, to 'fit' a sign. In developing the overall sign messages, and sign design, these considerations should be addressed in advance, eliminating the occurrence of this condition.

## **Section A Identity Standards**

### **PART II IDENTITY & GRAPHICS**

To begin this effort it is important to establish within UNM campus communications, that language and words are vital to wayfinding and the brand strategy. Words and their interpretation are the core of all UNM communications endeavors.

The same is true for the importance of language and words in the development and drafting of the ISS. The UNM Identity Standards are the established and accepted guidelines for communicating the look, feel and representation of the Institution. Identity standards often serve to establish policy, and as such should be drafted without the opportunity for varied interpretation. Identity standards are implemented to protect and warrant the representation and integrity of the brand image so that regardless of which market sector or public/private entity comes into contact with UNM, it is expressed and implemented consistently and aligns with strategic and marketing objectives.

The UNM Interior Signage Standards, ISS, are included under the umbrella of the UNM Identity Standards, and as such, shall not be altered without express consent from both UNM UCAM and UNM PDC.

## Section B Font Usage

### PART II IDENTITY & GRAPHICS

#### **Legibility**

Legibility is a function of typeface design. It is an informal measure of how easy it is to distinguish one letter from another in a particular typeface. Readability, on the other hand, is dependent upon how the typeface is used to create words.

For signage, best practices suggests that upper & lower case, u&lc, lettering is more legible for sighted users as u&lc words create a visible 'footprint' which is more easily identifiable than text presented in all caps.

Psychology  
PSYCHOLOGY

Visual Graphics may be presented in any size on a room sign, as long as it is larger than .625" cap height. U&lc lettering allows for more characters per line on a sign.

This is true for all instances where the purpose of words is for reading. In the case of honorific, donor or formal naming presentations, all caps text is appropriate. To distinguish wayfinding information from honorific naming, wayfinding information should always be in u&lc.

*Note: At no time shall the lettering of a sign be condensed, or the type size altered, to 'fit' a sign. In developing the overall sign messages, and sign design, these considerations should be addressed in advance, eliminating the incidence of this condition.*

Psychology  
PSYCHOLOGY

*Unacceptable  
Condensing  
of Type*







## Section B Font Usage

### PART II IDENTITY & GRAPHICS

#### **Tactile Font**

##### Vag Rounded Light

Best practices and as recommended by the leading international research center for the visually impaired, Lighthouse Guild, thinner, sans serif fonts present an ideal stroke width, and are easier for tactile reading. In research with the Lighthouse, 1993, those subjects tested were able to read the rounded fonts with more ease than other fonts, as pointed corners, and edges can cause discomfort for those tactile readers with diabetes, autoimmune and neurological diseases, painful neuropathy and tingling extremities.

A rounded font shall be used for all tactile lettering at UNM, using a softer, smoother, 'considerate' fabrication method to avoid harsh edges and corners.



*Per ADA .5" tactile lettering is permitted when duplicate visual text is provided. Actual size text displayed above.*

*Braille font is Type 2, with rounded points as required by ADA and using proper numeric representation without notation for capitalization.*

## Section C Typography Guidelines

### PART II IDENTITY & GRAPHICS

#### ***Abbreviations***

Often, standard abbreviations may be used for messages when using a sequence of words make it a challenge to include the entire formal name of a room or destination. In this instance accepted abbreviations should be used.

#### ***Acronyms***

Abandon use of Internal acronyms on signage, as they may be understood internally or by repeat users, however, they are alienating and confusing for first-time users, eg., ASAP, PPD.

The only acronym acceptable for public use should be UNM.

#### ***Donor/Honorific Recognition vs Wayfinding Information***

Within the Hierarchy of Information, Donor and Honorific names and recognition shall remain separate from Wayfinding information. To recall, wayfinding provides life-safety, & access information, combining donor and honorific naming and information to wayfinding further confuses the messages.

1. Honorific information recognizes a donor, person or an established name within the campus vernacular.
  2. Wayfinding information identifies a place, destination, amenity or service.
- B. Directional Information is for the purpose of guiding or giving direction.

Within the larger UNM Wayfinding & Signage program, these two types of information have very distinct guidelines for visual articulation and treatment. These guidelines establish a hierarchy for the information, allowing users to unconsciously distinguish information for navigating the environment more easily. Additional standards for specific treatment is illustrated in Part II, Section B Font Usage.

#### ***Letter Spacing***

Letter spacing, character spacing, kerning or tracking, is the adjustment of the horizontal white space between letters in word or block of text. Aside from font usage and font size, letter spacing is the most important variable that affects legibility and visual appearance of text and graphics. Today, the spacing between letters within a font is based on digital files set with a default setting, normal-letter spacing of zero, 0. Letter spacing is changed in increments of plus or minus.

## Section C Typography Guidelines

### PART II IDENTITY & GRAPHICS

Legibility relies on letterspacing based on the distance from which the words will be viewed—the further the distance, the wider the space between letters.

#### Visual Lettering

ADA mandates the minimum font size, approximate letter spacing and line spacing for signage, however, proper letter spacing is based on even, optical spacing for visual text. Almost never is type/text which is typed into a sign format evenly spaced without some manual spacing (kerning). These Standards provide for proper and optimum letter spacing for signs as a template for selected fabrication vendors and the UNM Physical Plant to follow.

There are many pitfalls in working with fonts, as there are "pair sets" within a font where the default spacing is *always* too tight, or too wide. Examples: ar, ry, tr, cr, ra, fi, etc. *Letters can never touch or be even close to touching.*

Conference  
Restroom  
Library  
Innovation  
Office

*The letter after a capital letter typically needs to be moved slightly closer closer. Other letters: f, r, s, t, a, and double letters ff, etc. always need more space added (except oo which needs less). Curved letters create the appearance of more optical space than vertical. (spacing shown needs either less or more space)*

Conference  
Restroom  
Library  
Innovation  
Office

*Spacing, left, illustrates optimum even letterspacing.*

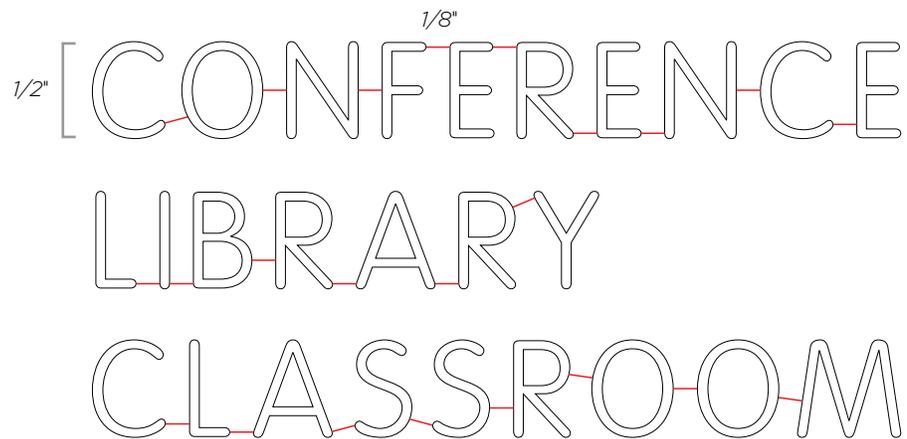
## Section C Typography Guidelines

### PART II IDENTITY & GRAPHICS

#### Tactile Lettering

The standards for tactile lettering follow the opposite spacing principle from visual lettering. ADA requires the minimum spacing between each tactile letter be 1/8," from the closest point between the each letter. This means the spacing is always visually uneven, which is why tactile lettering is not optimal to be used visually.

Tactile lettering may be 1/2" cap height only if accompanied by same Visual Text on sign. If only tactile lettering provided, tactile lettering size must be 5/8."

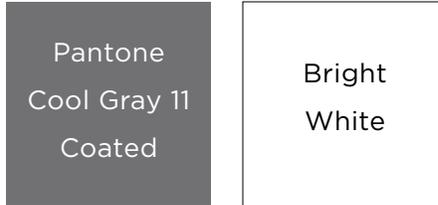


## Section D Color Palette & Graphic Elements

### PART II IDENTITY & GRAPHICS

#### Color Palette

Sign paint and vinyl colors to match Pantone Cool Gray 11, Coated.



#### Custom Elements

##### International Symbols & Custom Icons

The symbols illustrated represent the approved symbols & icons for the Interior Signage Standards. Symbols and custom icons used for all printed signage graphics, and maps. Signs shall use the International Symbols developed for the USDOT, Society for Experiential Graphic Design, SEGD, standard accessibility symbol, and custom icons developed specifically for UNM. Future custom icons shall be designed using a similar visual vocabulary to fit within the overall system of icons.

#### International Symbols



#### UNM Custom Symbols



## Section A Types of Signs

### PART III INTERIOR SIGNAGE SYSTEM

#### **Hierarchy of Signs**

The hierarchy of signs is a system, based on similar visual and organizational components, in which each level of the hierarchy is articulated by a sign size, or configuration. The hierarchy of signs, illustrates the complete system of sign components within the Interior Signage Standards. The illustration shows how the signs relate visually to one another, while being differentiated within the hierarchy, by size and/or layout.

The interior signage system is articulated by three categories of signs:

#### **Room Signs**

The purpose of rooms signs is to classify destinations, by their function, occupant or service.

#### **Wayfinding Signs**

Wayfinding signs are those signs intended to guide or direct users to destinations. Wayfinding signs include overhead and wall mount directionals. Wayfinding signs are located at strategic and logical, decision-making points.

#### **Regulatory Signs**

Regulatory signs serve to provide additional user information relevant to safety, security, and regulations. Regulatory signs include any and all information required by UNM SRS, NM Fire Marshal, City, State and Federal building codes, as well as prohibitive and liability information e.g., No Smoking/Vaping, No Firearms, etc.

# STUDENT SERVICES

*A1 Area & Department ID (detail p. 28)*

<b>5 Floor</b>	<b>2 Floor</b>
5400 Project ECHO*	2200 HSC Health Sciences Center
	2400 Sponsored Projects & PreAward
<b>4 Floor</b>	2600 Contract & Grant Accounting
4200 College of Pharmacy	2700 Budget & Reporting
New Mexico Poison	2800 Unrestricted Accounting
& Drug Information Center	
4400 UNM Hospital Ambulatory	
Business Operations	<b>1 Floor</b>
Pre-Registration Center	UNMH Clinical Education
Interpreter Language Services	1200 Cottonwood
Video Call Center	1300 Pihon
Frontline Education	1350 Roadrunner
	1400 Clinical Education
<b>3 Floor</b>	1400 Project ECHO*
3300 Community Health Worker Initiatives	1500 Whale
3200 HSC Compliance Office	1550 Dolphin
HSC Privacy Office	1600 Submarine
3200A UNMH HIM Medical Records	1650 Beluga
& Transcription	1800 Reception
3600A Robert Wood Johnson Foundation	1700 HSC Communications
Nursing & Health Policy Collaborative	& Marketing Studio
3600C College of Nursing Research	
& Ph.D. Studies	
<b>BUSINESS &amp; COMMUNICATIONS CENTER</b>	

*B1 Building Directory (detail p. 29)*

# McKINNON CENTER FOR MANAGEMENT

*G1 Building ID Vinyl Graphics (detail p. 32)*

## Section B System Diagram

### PART III INTERIOR SIGNAGE SYSTEM



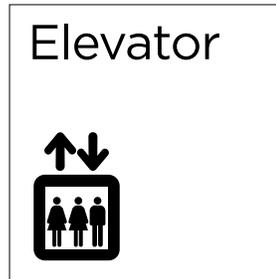
D1 Directional Wall Mount



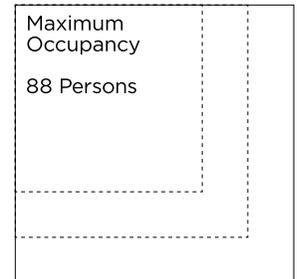
D2 Directional Overhead Soffit & Ceiling Mount



F1 Flag Mount Room ID



F2 Flag Mount Amenity ID



I1 Information Signs



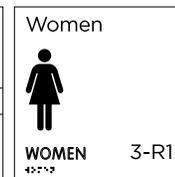
R1 Room ID



R1 Room ID



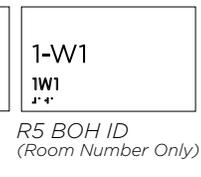
R2 Office ID



R3 Amenity ID



R4 BOH ID  
(with Room Name)



R5 BOH ID  
(Room Number Only)



R6 Stair/Code ID



R7 Stair/Code Floor ID



R8 Code Fire Evacuation  
(located at elevator upper floors)

## Section C Sign Details

### PART III INTERIOR SIGNAGE SYSTEM

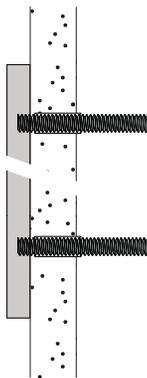
#### ***Sign Type A Area & Department Identification***

Horizontal brush finish surface, water-jet or laser-cut individually cut letters cut from aluminum sheet (as individually specified) with sand-blasted/matt edges. Used to identify large public areas and departments, including but not limited to: information, reception, registration, bursar, etc., it may include a College or School foyer, auditorium entry. In all instances, Sign Type A shall be mounted above entry or window to/of area, and fabricated at a size relative to the area where it is intended, not to exceed 3 3/4" cap height, minimum 2" cap per ADA. Letter spacing to be proportionate to the cap height and thickness. Lettering shall always appear in all caps and spaced to a minimum of 125% of vertical stroke width with even optical spacing..

The font size is determined as to accomodate ADA for optimum viewing distance for those persons with medium to low visual acuity. *Diagrams illustrate sign dimensions and proper letter spacing, but are not intended to represent sign color.*

# STUDENT SEF

*A1 Elevation, no scale*



*A1 Section, no scale  
(stud mount shown)*

*3.75" x .25" thick horizontal  
brush aluminum, individually  
cut letter.*

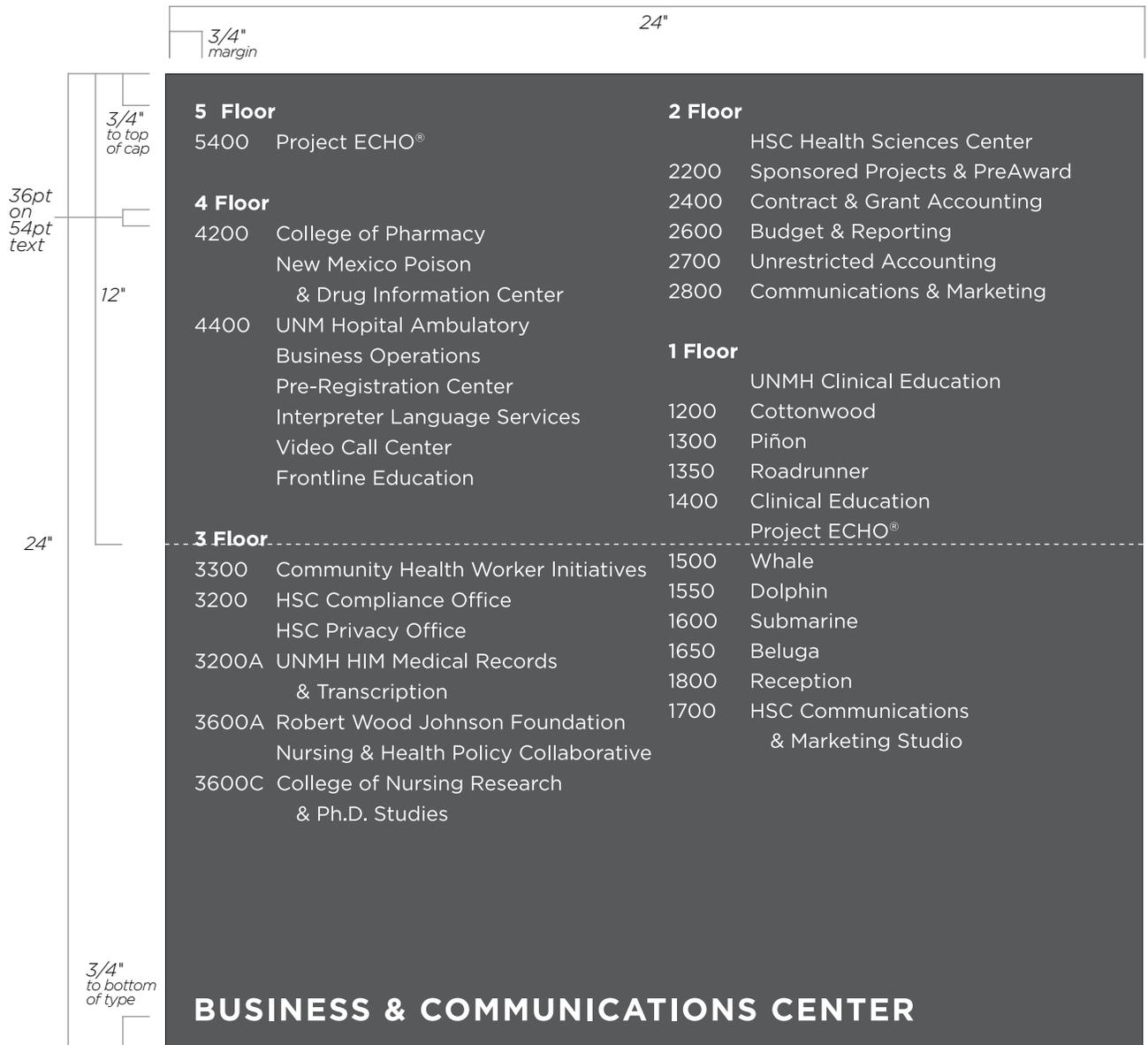
*Mounted flush to wall  
surface with tape and/or  
stud mounts.*

## Section C Sign Details

### PART III INTERIOR SIGNAGE SYSTEM

#### **Sign Type B Building Directory**

Used to identify occupants/tenants within a building. Directory is located within the building interior and adjacent to the main entrance. Directories are never intended to be used for advertising using tenant logos. Building directory provides the occupant name and room number in numerical order based on floor and room number, not alphabetical order. Floor sequence is based on highest floor to lowest, (top to bottom) to depict literal building architecture. Font to be a minimum of 36pt type to accommodate complete listing. Overall Dimensions: 24" x 24" *Diagram illustrates sign dimensions and proper letter spacing, but is not intended to represent sign color.*



B1 Elevation, 24" x 24"

## Section C Sign Details

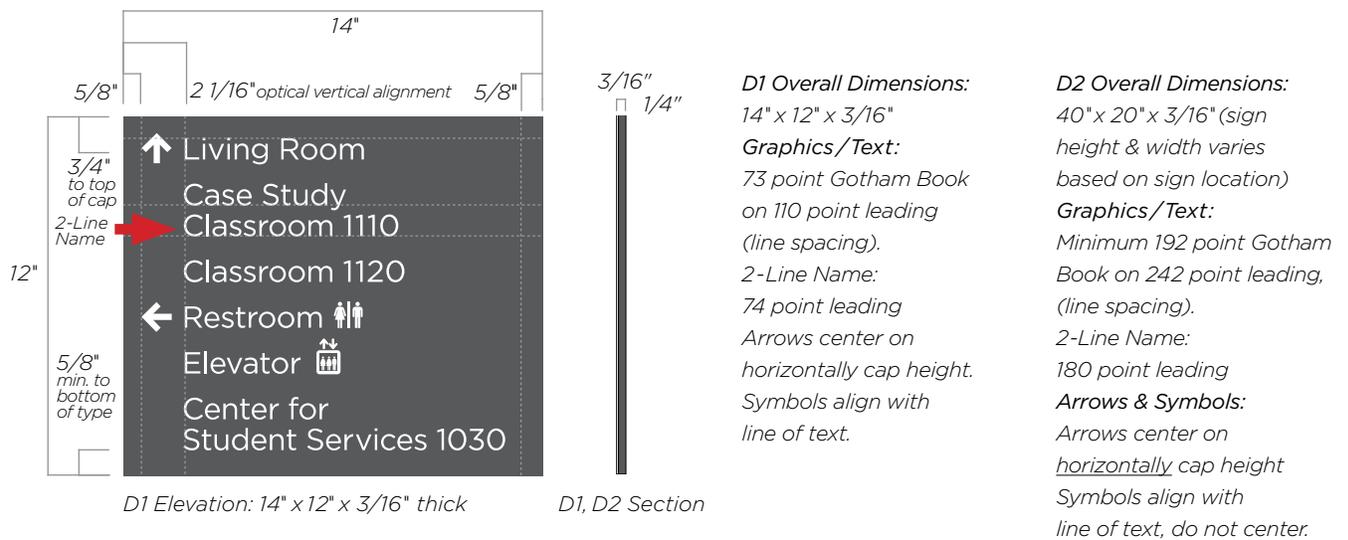
### PART III INTERIOR SIGNAGE SYSTEM

#### **Sign Type D1 Wall Mount Directional &**

#### **Sign Type D2 Overhead Soffit Mount & Suspended Directional**

Used to direct users to destinations. These wall mounted and overhead signs are located at key decision-making locations. In all instances font size is calculated based on regulations mandated by ADA for viewing distance. Optimum layout should not exceed five (5) destinations per sign.

*Diagrams illustrate sign dimensions and proper letter spacing, but are not intended to represent sign color.*



## Section C Sign Details

### PART III INTERIOR SIGNAGE SYSTEM

#### Sign Type F1, F2, F3 2-Sided Flag Mount Identification

Used to identify primary destinations and areas, where applicable, such as departments, classrooms, conference rooms, boardrooms, auditoriums, services and amenities: restrooms, vending, etc. Sign is flag mounted, perpendicular to wall, using a T-shape, painted aluminum panel. Mounted at a minimum height of 8' above floor, and as dictated by the specific building architecture. Sign Type F graphics are mandated by ADA. Sign layout includes area/destination name and room number or symbol.

*Diagrams illustrate sign dimensions and proper letter spacing, but are not intended to represent sign color.*



F1, F3 Elevation: 12" x 12" x 3/8" or 12" x 12" x 3/8"



F2, F4 Elevation: 12" x 12" x 3/8" or 12" x 12" x 3/8"

#### F1 Text Only

Overall Dimensions:  
12" x 12" x 3/8" ±  
x 1 7/8" (mounting  
hardware)

#### F3 Text Only

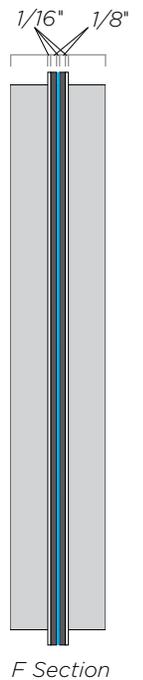
Overall Dimensions:  
10" x 10" x 3/8" ±  
**Graphics/Text:**  
152 point Gotham Book  
on 158 point leading  
(line spacing).  
2-Line Name:  
158 point leading

#### F2 Text & Symbol

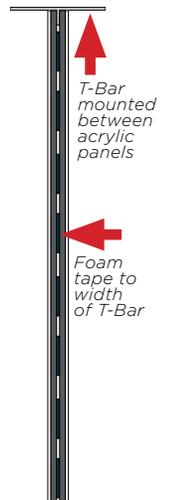
Overall Dimensions:  
12" x 12" x 3/8" ±  
x 1 7/8" (mounting  
hardware)

#### F4 Text & Symbol

Overall Dimensions:  
10" x 10" x 3/8" ±  
**Graphics/Text:**  
152 point Gotham Book  
on 158 point leading  
(line spacing).



F Section



F Plan Section

## Section C Sign Details

### PART III INTERIOR SIGNAGE SYSTEM

#### ***Sign Type G1, G2, G3 Vinyl Graphics on Glass***

The purpose of these signs is to identify the building, advise and instruct users, and provide prohibitive, legal and safety information. Graphics are always centered within window area between vertical mullions.

*Diagrams illustrate sign dimensions and proper letter spacing, but are not intended to necessarily represent sign color.*

# McKINNON CENTER FOR MANAGEMENT

*G1 Building ID Vinyl Graphics (3/4" Cap Height minimum 2 3/4" maximum)*



*G2 Prohibitive & Liability Vinyl Graphics*

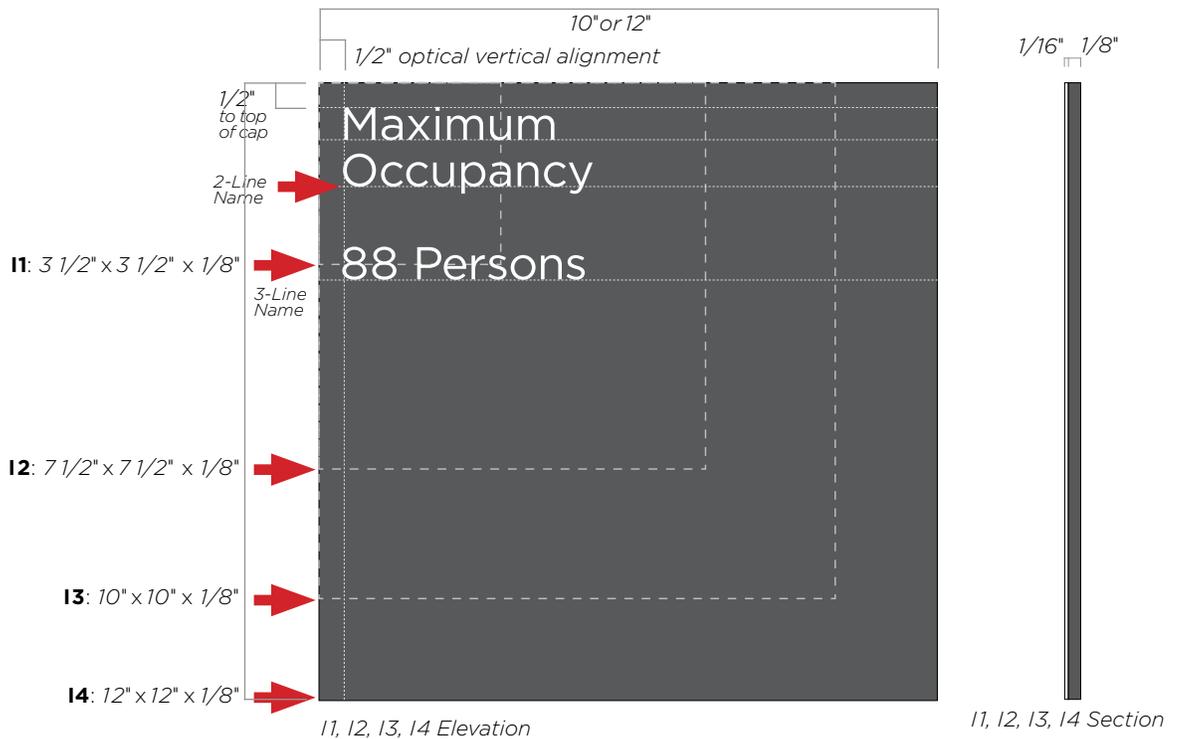
## Section C Sign Details

### PART III INTERIOR SIGNAGE SYSTEM

#### Sign Type I Information Signs

These signs are used to provide consistency to all Information Signs required for UNM facilities. Any information, from code required occupancy signs to prohibitive cell phone signs shall use this sign type. Four (4) sizes of signs are available for use. Placement is as directed by UNM PDC, and based on condition. *These signs are not required by ADA.*

*Diagrams illustrate sign dimensions and proper letter spacing, but are not intended to represent sign color.*



**11-14 Graphics/Text:**  
64.25 point Gotham Book  
on 65 point leading  
(line spacing).  
2-4 Line Name/Text:  
65 point leading



15 Safety & Information Signs Elevation: 3.5" x 3.5" x 1/8," centered graphics

**15 Graphics/Text:**  
50 point Gotham Medium  
on 54 point leading  
(line spacing).  
2-4 Line Name/Text:  
54 point leading

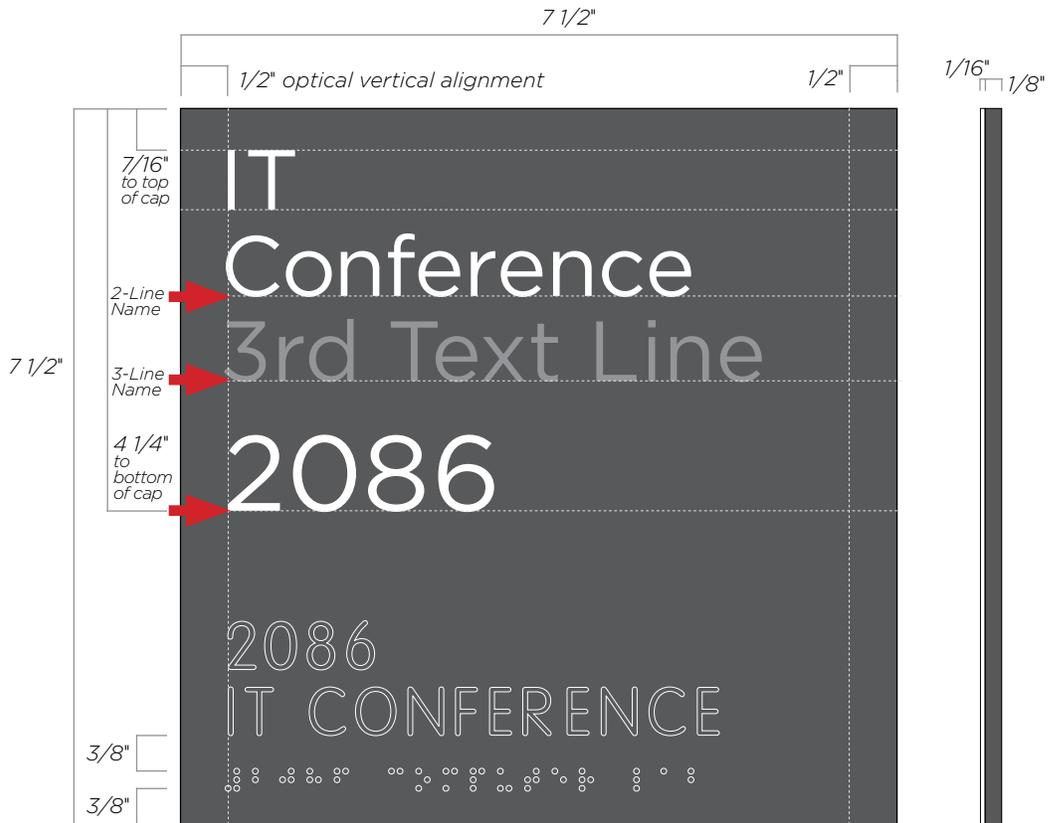
## Section C Sign Details

### PART III INTERIOR SIGNAGE SYSTEM

#### **Sign Type R1 Room ID**

Used to identify all non-office and non BOH rooms, including: Mechanical No Storage, Electrical No Storage, TR No Storage, and fire and code required room sign located within public access way. The R1 sign accomodates ADA, as it includes the required room name and number, in tactile and braille.

*Diagram illustrates sign dimensions and proper letter spacing, but is not intended to represent sign color.*



R1 Elevation: 7 1/2" x 7 1/2" x 3/16"

R1 Section

**R1 Graphics/Text:**  
 64.25 point Gotham Book  
 on 65 point leading  
 (line spacing).  
 2 Line Name:  
 80.5 point leading  
 Room Number:  
 80.5 point Gotham Book  
 4 1/4" from base of  
 number to top of sign

## Section C Sign Details

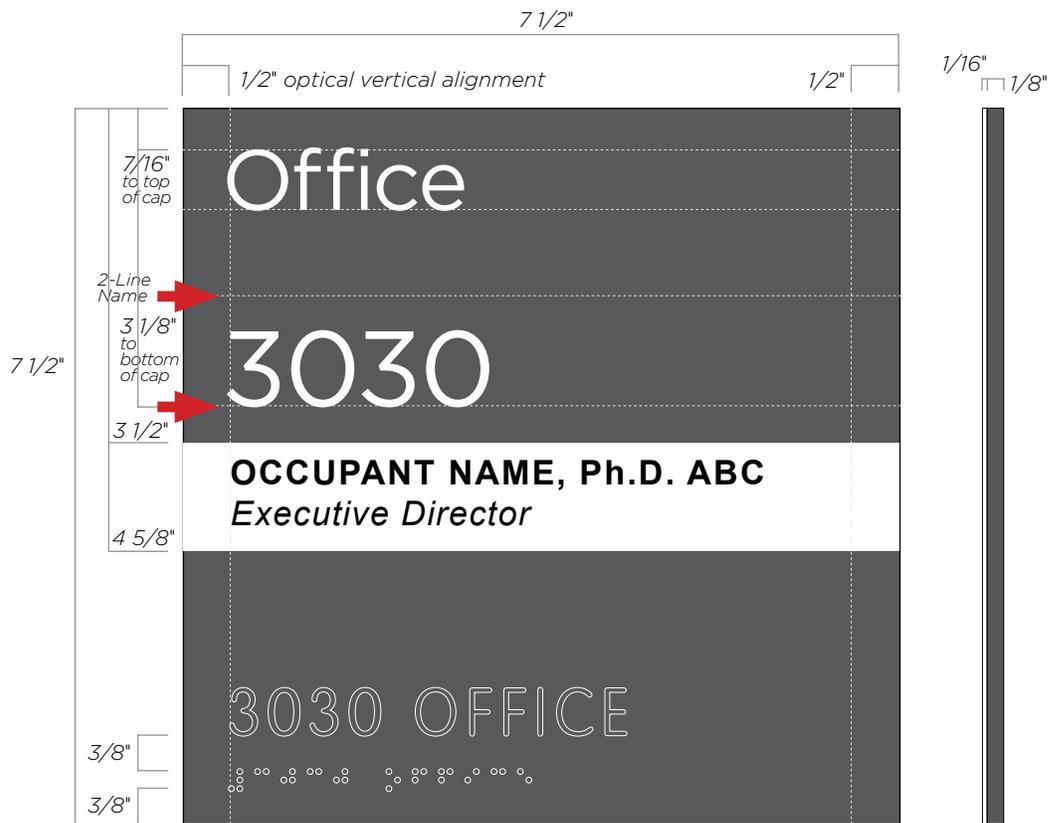
### PART III INTERIOR SIGNAGE SYSTEM

#### **Sign Type R2 Office ID**

Used to identify designated offices and includes a removeable name strip for the occupant name.

The R3 sign accomodates ADA, as it may have a room name in tactile and braille, where applicable.

*Diagram illustrates sign dimensions and proper letter spacing, but is not intended to represent sign color.*



R2 Elevation: 7.5" x 7.5" x .3/16"

R2 Section

**R2 Graphics/Text:**  
 64.25 point Gotham Book  
 on 65 point leading  
 (line spacing).  
 2 Line Name:  
 80.5 point leading  
 Room Number:  
 80.5 point Gotham Book  
 3 1/8" from base of  
 number to top of sign

## Section C Sign Details

### PART III INTERIOR SIGNAGE SYSTEM

#### Sign Type R3 Amenity ID

Used to identify all amenity rooms: restroom, lactation, lockers, etc., incorporating a symbol and text. The R4 sign includes a room number for UNM internal use only.

For restrooms, when all restrooms are accessible, no Access Symbol is required. When any restrooms are not wheelchair accessible, the Access Symbol is required, as well as an accompanying sign with map and/or clear directions to the nearest accessible restroom.

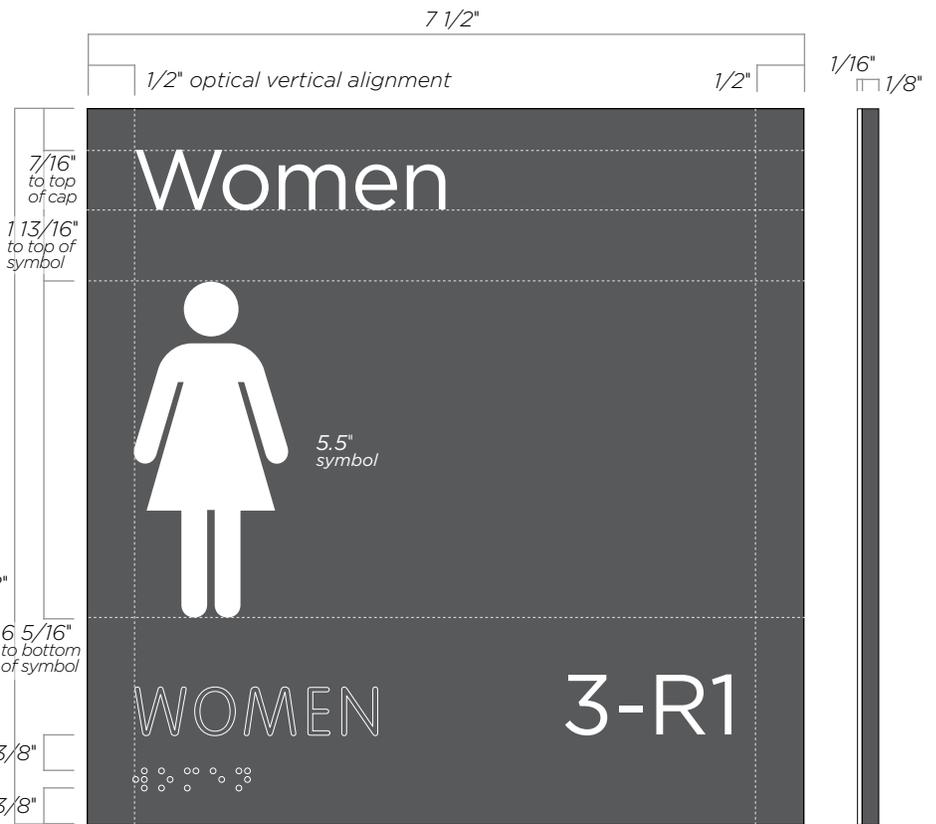
*Diagrams illustrate sign dimensions and proper letter spacing, but are not intended to represent sign color.*



**R3A** Accessible Restroom 7 1/2" x 7 1/2"  
(only used in buildings where there are non-accessible restrooms)



**R3B** Accessible Restroom Location  
7 1/2" x 7 1/2"  
Minimum text height 5/8"  
(mounted with non-accessible restroom sign, only used in buildings where there are non-accessible restrooms)



R3 Elevation: 7 1/2" x 7 1/2" x 3/16"

R3 Section

**R3 Graphics/Text:**  
64.25 point Gotham Book  
on 65 point leading  
(line spacing).  
1 13/16" from top of  
symbol to top of sign  
Room Number aligns with  
bottom of raised/tactile  
lettering.

## Section C Sign Details

### PART III INTERIOR SIGNAGE SYSTEM

**Sign Type R4 Utility ID with Room Name** (public access way)

**Sign Type R5 Utility ID Room Number Only** (public access way)

**Sign Type R6 BOH Utility ID Room Number Only** (non-public access way)

Used to identify non-essential, janitorial, closet, storage, back-of-house, BOH, rooms located within public corridors, except Sign Type R6 which is located solely within non-public access ways. Rooms identified with these signs are not for public use and typically contain the UNM Utility Numbering System.

Signs accommodate ADA, as they include visual text for room name and and/or number, where applicable, as well as tactile and braille.

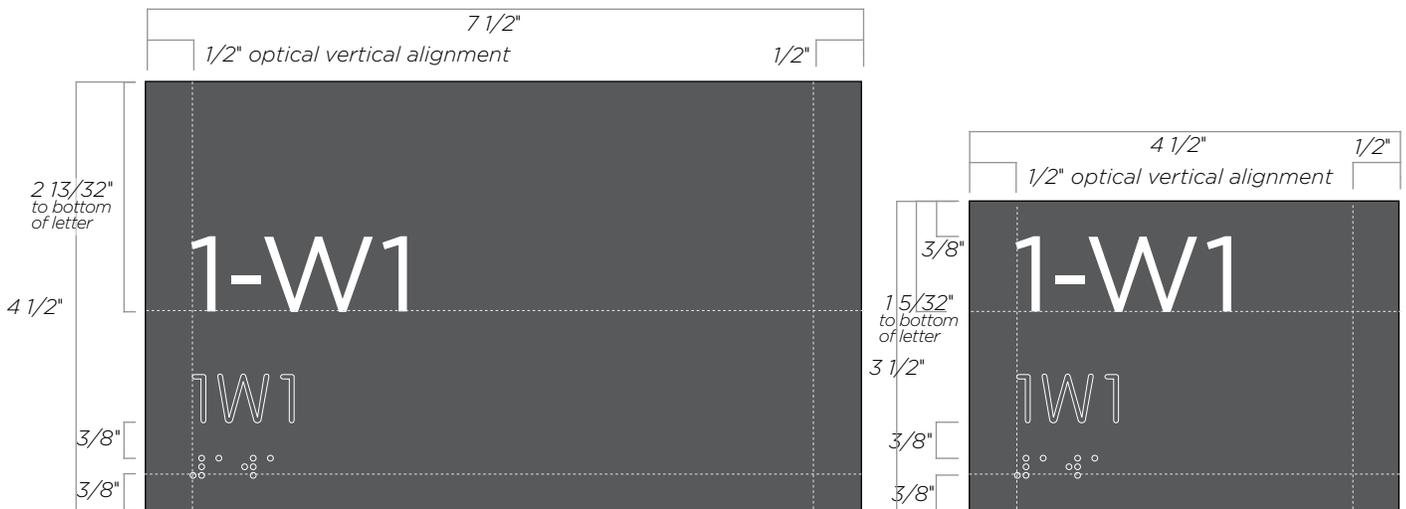
Diagrams illustrate sign dimensions and proper letter spacing, but are not intended to represent sign color.

R4, R5, R6 Graphics/Text:  
64.25 point Gotham Book  
on 65 point leading  
(line spacing).  
Room Number 80.5 point  
Gotham Book



R4 with Room Name, Elevation: 7 1/2" x 4 1/2" x 3/16"

R4, R5 Section



R5 Room Number Only, Elevation: 7 1/2" x 4 1/2" x 3/16"

R6 BOH Elevation: 4 1/2" x 3 1/2" x 3/16"

## Section C Sign Details

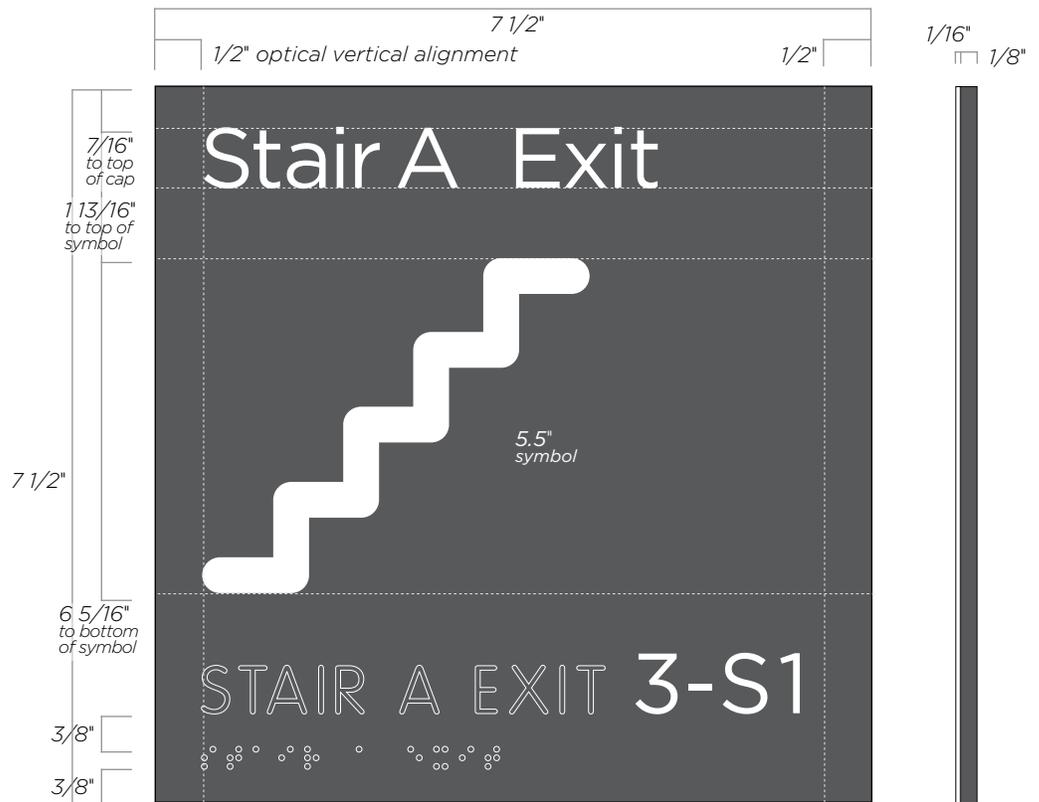
### PART III INTERIOR SIGNAGE SYSTEM

#### **Sign Type R6, Stair Identification** (p. 45 for sign location)

Used to identify all Fire Safety and Emergency Egress access ways. Signs include Stair, Do Not Enter, Emergency Exit Alarm Will Sound, No Reentry, etc, or as directed by the New Mexico Fire Marshal.

R6 signs are mandated by ADA, as they include the visual text for required stair identification and exit information as well as tactile and braille.

*Diagram illustrates sign dimensions and proper letter spacing, but is not intended to represent sign color.*



R6 Elevation: 7 1/2" x 7 1/2" x 3/16" (p. 45 for sign location)

R6 Section

**R6 Graphics/Text:**  
64.25 point Gotham Book  
on 65 point leading  
(line spacing).  
Including Room Number  
Symbol  
1 13/16" from top of  
symbol to top of sign  
Room Number aligns with  
bottom of raised/tactile  
lettering.

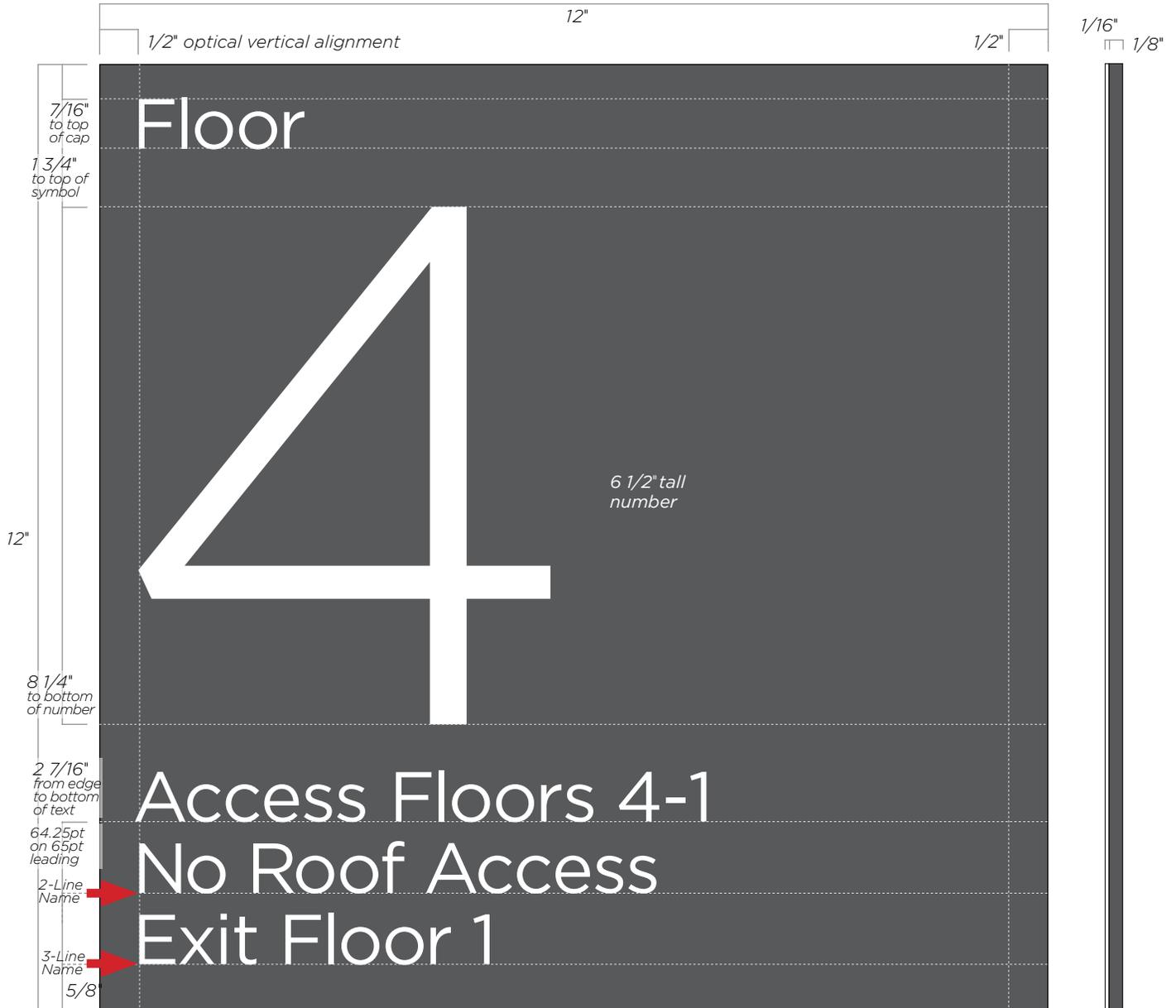
## Section C Sign Details

### PART III INTERIOR SIGNAGE SYSTEM

#### **Sign Type R7 Stairwell Floor Identification** (p.45 for sign location)

Used to identify each floor within stairwell as prescribed by the IBC and New Mexico Fire Marshal.

*Diagram illustrates sign dimensions and proper letter spacing, but is not intended to represent sign color.*



R7 Elevation: 12" x 12" x 3/16" (p. 45 for sign location)

R7 Graphics/Text:  
64.25 point Gotham  
Book on 65 point leading  
(line spacing).  
Floor Number  
1 3/4" from top of  
number to top of sign

R7 Section

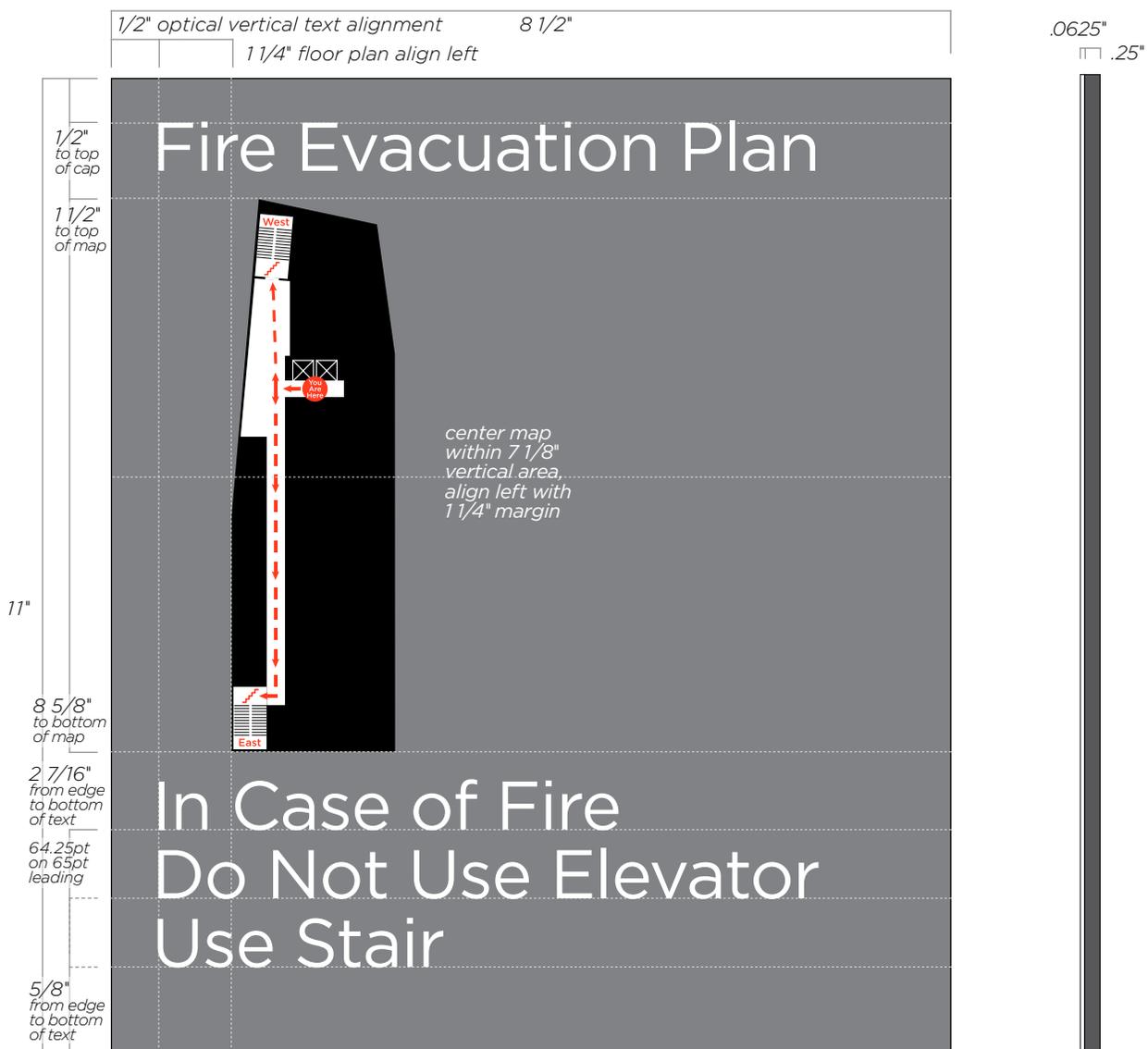
## Section C Sign Details

### PART III INTERIOR SIGNAGE SYSTEM

#### **Sign Type R8 Fire Evacuation Diagram at Elevator**

Used to identify two nearest fire exit stairways. Signs are located adjacent to elevator on upper floors only. Ground floor does not have egress sign. Map is oriented based of viewing location.

*Diagram illustrates sign dimensions and proper letter spacing, but is not intended to represent sign color.*



R8 Elevation: 8.5" x 11" x 3/16"

**R8 Graphics/Text:**  
56 point Gotham Book  
on 56 point leading  
(line spacing).  
Building Diagram  
center within area  
1 1/4" left margin

R8 Section

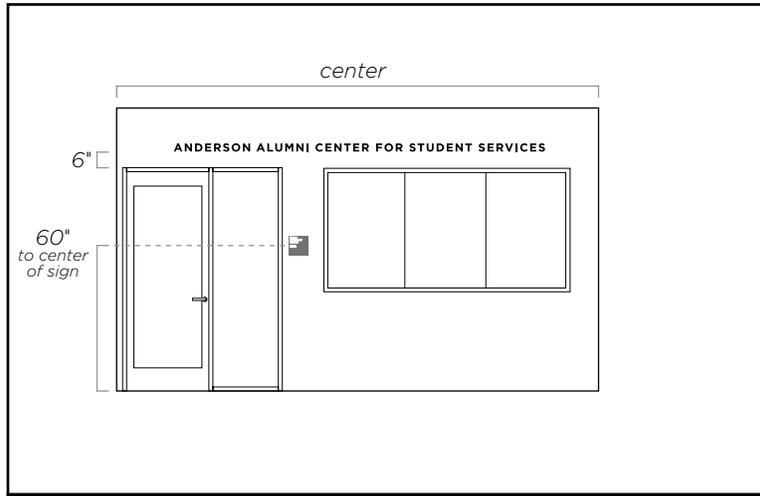
**Section D Installation Details**

**PART III  
INTERIOR SIGNAGE  
SYSTEM**

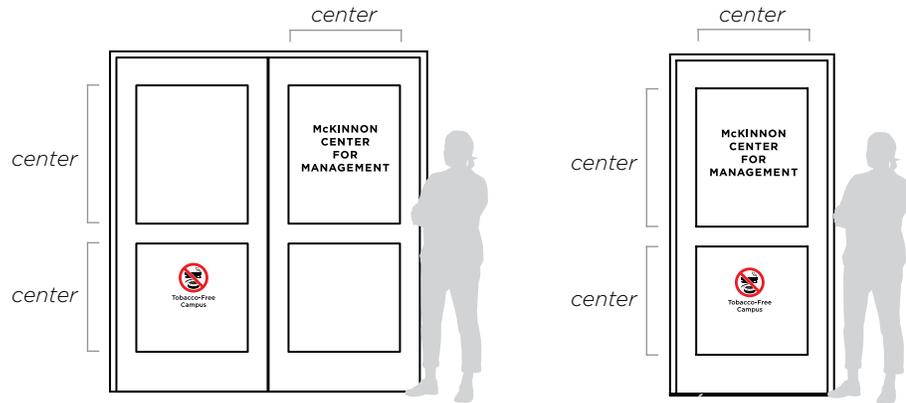
***Sign Type A Area & Department Identification***

***Sign Type G1 Building ID Vinyl Graphics***

***Sign Type G2 Prohibitive & Liability Vinyl Graphics***



*Sign Type A1 Area & Dept ID and Sign Type R1 Room ID, no scale*



*Double Door Entry  
Sign Type G1 Building ID &  
Sign Type G2 Prohibitive & Liability  
Vinyl Graphics, no scale*

*Single Door Entry  
Sign Type G1 Building ID &  
Sign Type G2 Prohibitive & Liability  
Vinyl Graphics, no scale*

## Section D Installation Details

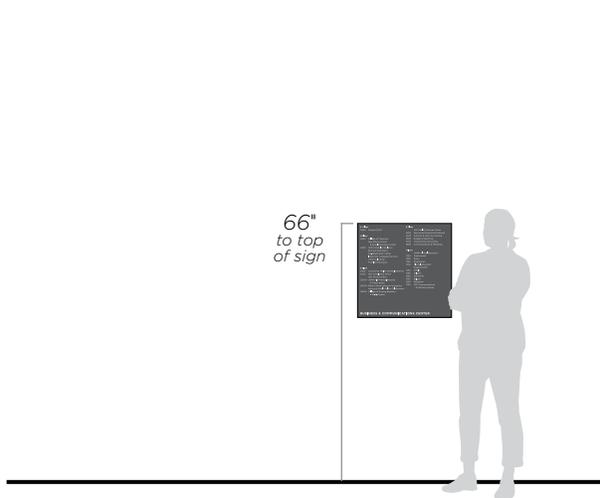
### PART III INTERIOR SIGNAGE SYSTEM

#### ***Sign Type B Building Directory***

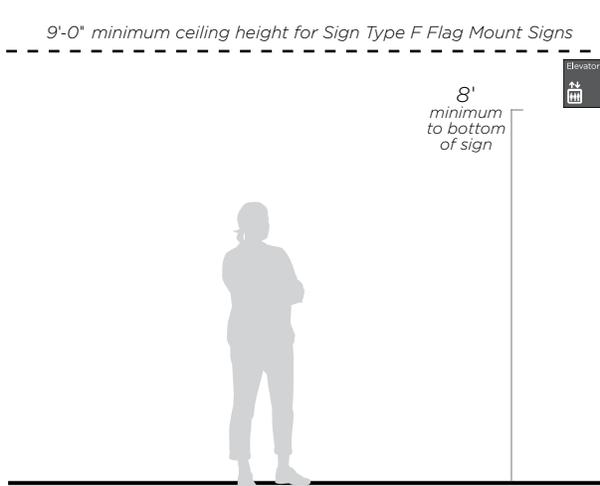
#### ***Sign Type D1, D2 Wall Mount Directional Signs***

#### ***Sign Type F1, F2, F3 2-Sided Flag Mount Identification***

9'-0" minimum ceiling height for all flag mount signs.



*Sign Type B1 Building Directory, no scale*



*Sign Type F1, F2, F3 Flag Mount Identification, no scale  
(In the case of 9' ceiling use 10" x 10" sign)*

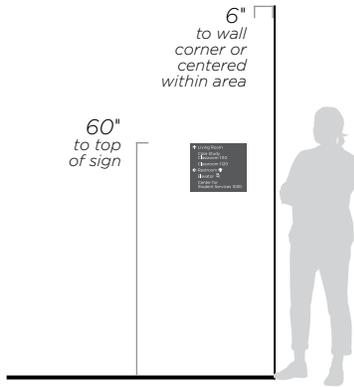
## Section D Installation Details

### PART III INTERIOR SIGNAGE SYSTEM

#### **Sign Type D1 Wall Mount Directional &**

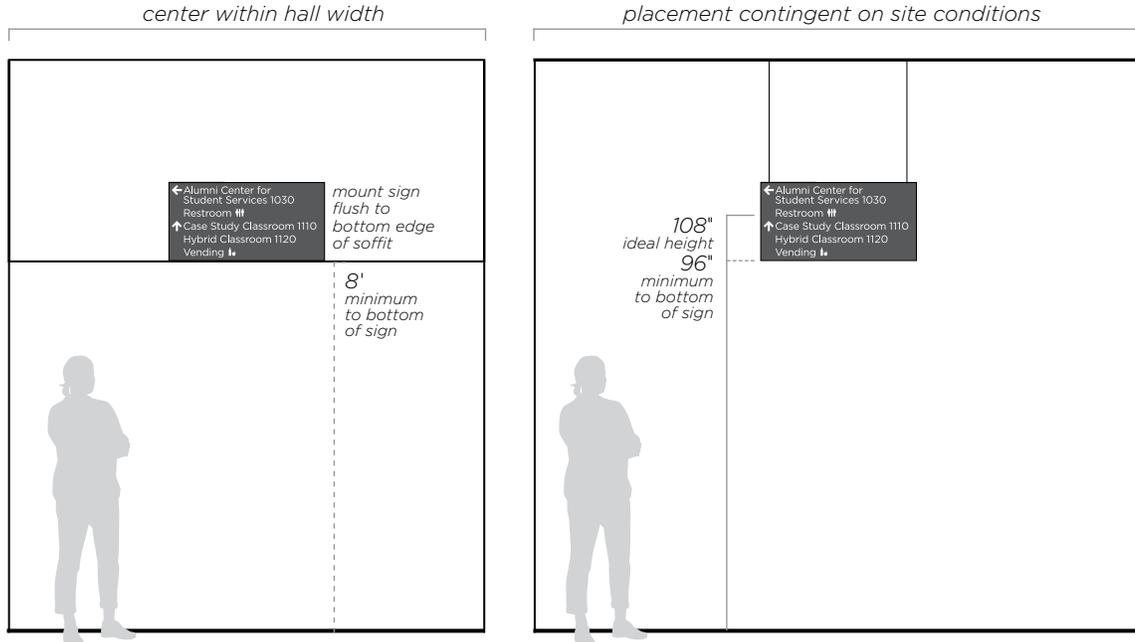
#### **Sign Type D2 Overhead Soffit Mount & Suspended Directional**

8'-0" minimum ceiling height for all overhead soffit mount directional signs and 10'-0" minimum ceiling height for all suspended directional signs.



*Sign Type D1 Wall Mount Directional*

*D1 Elevation: 14" x 12" x 3/16" thick*



*Sign Type D2 Soffit Mount Directional Sign, no scale. Maximum height from bottom of sign is 10'.*

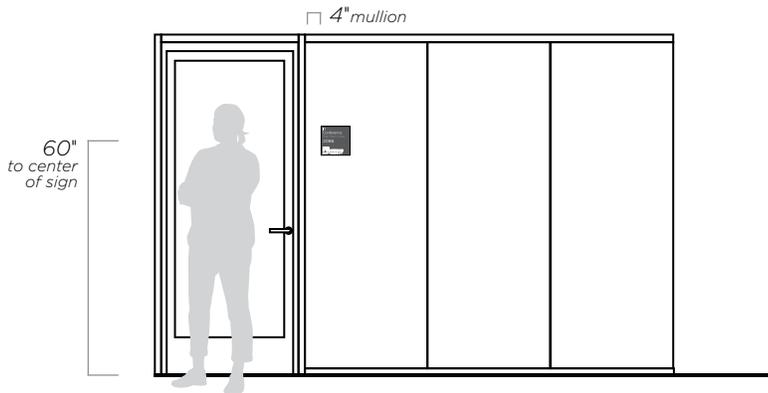
*Sign Type D2 Suspended Directional Sign, no scale. 9' foot minimum ceiling for overhead sign.*

## Section D Installation Details

### PART III INTERIOR SIGNAGE SYSTEM

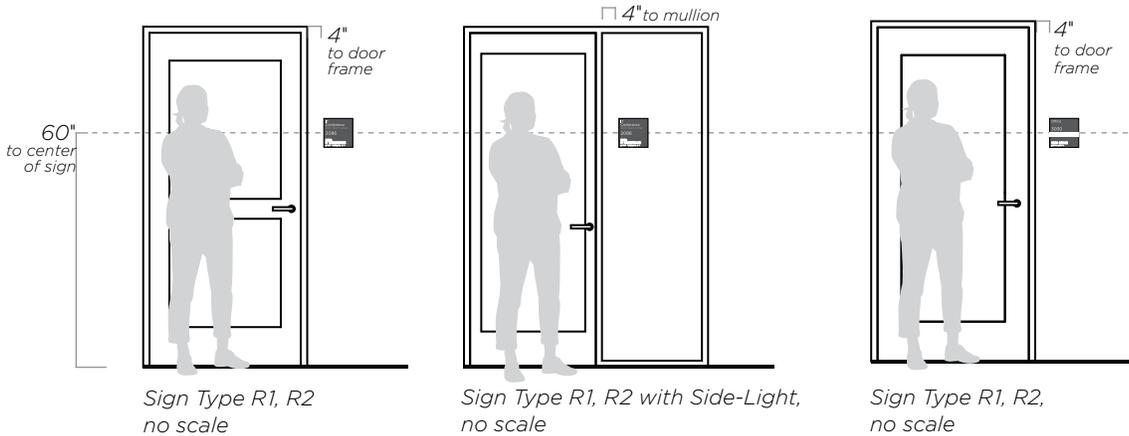
**Sign Type R1 Room ID, Sign Type R2 Office ID, Sign Type R3 Amenity ID with Symbol, Sign Type R4 Utility ID with Room Name, Sign Type R5 Utility ID Room Number Only, Sign Type R6 BOH Room Number Only**

Per U.S. Access Board, Marsha K. Mazz, Director, Office of Technical & Information Services: Window assemblies are considered part of the wall in which they are installed. As such, room sign must be mounted directly onto side-light and not on adjacent wall.



Sign Type R1 Room ID Glass Wall, no scale

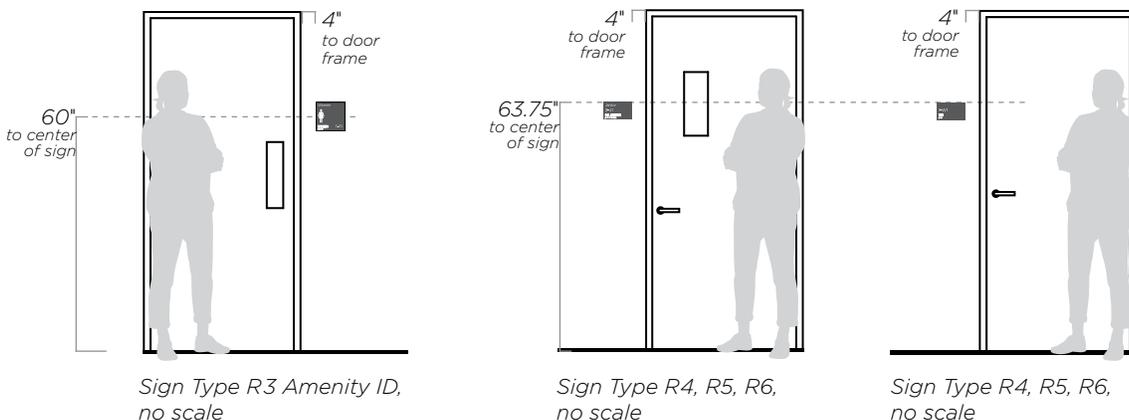
*NOTE: At no time shall room signs be centered between two doors or under any other circumstance, sign shall always be mounted 4" from door frame or side-light mullion.*



Sign Type R1, R2  
no scale

Sign Type R1, R2 with Side-Light,  
no scale

Sign Type R1, R2,  
no scale



Sign Type R3 Amenity ID,  
no scale

Sign Type R4, R5, R6,  
no scale

Sign Type R4, R5, R6,  
no scale

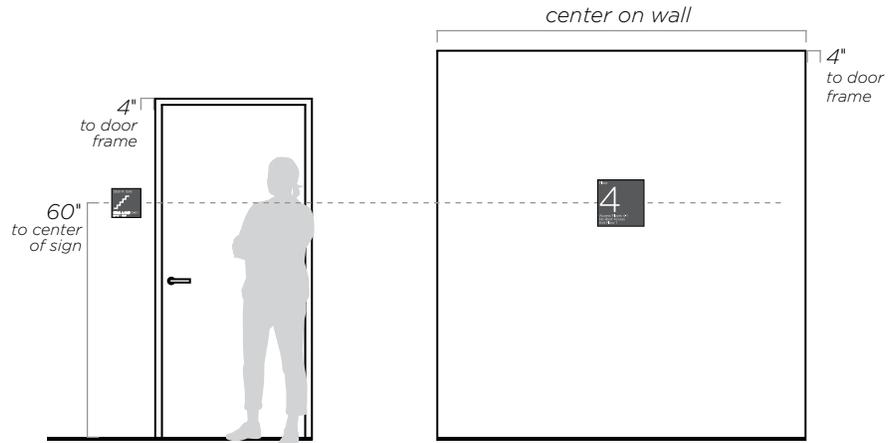
## Section D Installation Details

### PART III INTERIOR SIGNAGE SYSTEM

#### ***Sign Type R6, Stair Identification***

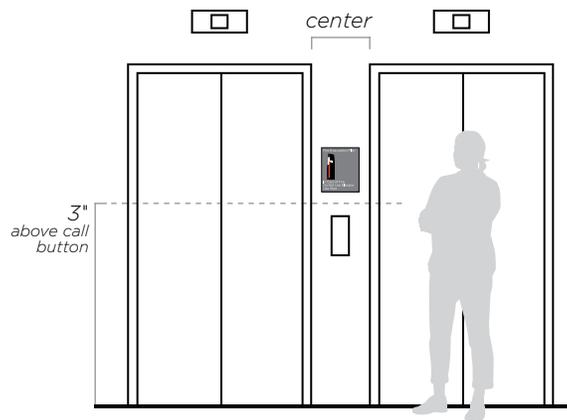
#### ***Sign Type R7 Stairwell Floor Identification***

#### ***Sign Type R8 Fire Evacuation Diagram***



*Sign Type R6 Stair ID, no scale. Mount sign in same relative location within stairwell.*

*Sign Type R7 Stairwell Floor ID, no scale*



*Sign Type R8 Fire Evacuation Diagram, located on upper floors only, not on Ground Floor, no scale. Mount window insert sign 3" and centered above call button.*

## Section A General Specifications

### **PART IV FABRICATION REQUIREMENTS**

Sign fabrication consists of simple acrylic panels. The quality and fabrication of this system fulfills UNM objectives for a consistent, cost effective, flexible, updateable sign program, utilizing the highest quality fabricated components.

- A. All typography and layout, including letter spacing, line spacing, alignment of arrows, etc., are required to comply with these Interior Signage Standards.
- B. Shop Drawings shall reflect final letter spacing for all sign layouts, and is to be approved by UNM PDC.
- C. Contractor shall provide precise letter spacing templates for all cut letters.
- D. Sign Fabrication. All acrylic signs shall have sanded, painted edges, and when composed of multiple acrylic sheets, shall align.
- E. Sign Installation. All components of the interior signage program are mounted to a wall surface unless specified otherwise. Mounting signs to glass walls and side lights is discouraged wherever possible. ADA requires 'reasonable' accommodation, to this end, mounting room signs to the nearest wall surface is preferred.

#### **System Description**

- A. Signage program consists of components for identification, direction, control, and information.
- B. Signage program is composed of a very simple system of components, using simple clear and painted acrylic and vinyl graphics.
- C. ADA Design Requirements
  - 1. Signage requiring Tactile graphics:
    - a. Wall mounted signs designating all permanent rooms and enclosed spaces along public corridors.
  - 2. Signage not requiring tactile graphics but requiring compliance to other ADA requirements: all signs providing direction to and/or information providing public, regulatory and safety information, including directional signs, informational signs (operating hours, policies, etc.), regulatory signs (no smoking, do not enter), and ceiling and projected wall mount signs.

## Section A General Specifications

### PART IV FABRICATION REQUIREMENTS

3. Excluded signage:
  - a. Exterior Signs, except Pedestrian & Vehicular Directional Signs
  - b. Building Directories.
  - c. Temporary Signs, include personnel signage/notices and tenant identification.
- C. ADA Performance Requirements:
  1. Tactile signs mounting requirements:
    - a. Single Doors. Mount 60" to center of sign above finish floor and on wall adjacent to latch side of door, or nearest adjacency, unless side-light or glass walls prohibit intended installation.
    - b. Openings. Mount 60" to center of sign above finish floor adjacent opening.
    - c. No wall space adjacent latch side of door, opening, or double doors: *Mount 60" to center of sign above finish floor on nearest adjacent wall.*

#### **Material Specifications**

The following standard materials specifications shall be followed without alteration and/or substitution.

#### 101400 Signage - Interior

##### *Part I - General Requirements*

##### 1.1 Preliminary

Any conflict between these general conditions and any other documents issued by UNM Planning, Design & Construction, PDC, and/or forming part of this contract, the requirements of UNM PDC document shall take precedence and apply.

##### 1.2 Definitions

For the purpose of this document the following definitions apply:

- A. UNM PDC shall mean UNM Planning, Design & Construction and its designate.
- B. Contractor shall mean the approved *sign fabricator* for the project.
- C. Adhesive shall mean any liquid, sheet, tape or foam tape adhesive or solvent bonding system.
- D. Character shall mean any visual element of a sign, including letters, numerals, punctuation marks, symbols, etc.
- E. Paint shall mean any paint, ink, dye, varnish or other coating material.
- F. Sign shall mean any sign, graphic work to be applied to the architecture or other element described or specified.

## Section A General Specifications

### **PART IV FABRICATION REQUIREMENTS**

G. Shop Drawings shall mean any drawings provided by Contractor for the purpose of depicting and articulating sign details, installation, fasteners, etc. that comprise part of the Contractor deliverable.

#### 1.3 Submittals

Sign Fabricator shall submit all items listed below to UNM PDC for approval prior to fabrication or installation.

- A. Detailed production and installation schedule for all sign types including dates for submission and approval of all required samples, shop drawings and other submissions required under this contract.
- B. Shop drawings illustrating proposed details for fabrication and installation of all components. These shall include large-scale details of construction, plans, elevations, and large-scale sections of typical elements and other components. Present mounting methods, grounds, mounting heights, layout, spacing, reinforcement, accessories, and installation details, anchorages and accessory items. Shop Drawings incorporating UNM PDC ISS documents shall not be reproduced and submitted as Sign Fabricator Shop Drawings, but must be drawn and produced by Contractor.
- C. Where architectural design requires deviation from these UNM ISS any variations shall be shown on shop drawings and be specifically identified and highlighted as such by the Contractor. All proposed variations shall equal or surpass the requirements of the originally specified items with regard to appearance, finish, material qualities, size, etc., and must be reviewed and approved by UNM PDC.
- D. It shall be assumed the Contractor has inspected the site and is aware of all site and operational conditions affecting the fabrication and installation of work. No extra charges shall be claimed or allowed due to a failure of the Contractor from making such inspections.
- E. Failure to request clarification of any inadequacy, omission or conflict with regard to a signage project will not relieve the Contractor of responsibility. Signing of the contract will be considered as implicitly denoting the Contractor has a thorough and complete comprehension of the intent and scope of the signage program.
- F. Contractor shall be responsible for assuring there are no pricing or tabulation errors in submitted bids and shall not make any claims for additional payment as a consequence of any such errors.

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### PART IV FABRICATION REQUIREMENTS

- G. Provide accurate and complete message schedule, including list for all graphic elements on each sign, correct representation for all caps upper & lower case text, all caps tactile lettering, representation of fonts, final letter spacing, and sign location plan.
- H. Full-size paper reproductions, blackline prints or photocopies of artwork for all graphic components. All full-size layouts and/or artwork will be reviewed by UNM PDC for size, sharpness, alignment, accuracy of letterforms, layout accuracy, and letter, word and line spacing.
- I. One copy only of full-size templates for all sign types, such as individually cut letters, vinyl letters, three-dimensional signs, etc. All such templates must accurately and clearly show, with easily readable lines the body of the character and all elements and their intended proper optical spacing.
- J. Manufacturer product data, specifications and installation instructions for all materials and for each type of electrical, mechanical, or other items of equipment to be supplied or incorporated into the work.
- K. One sample of each sign type or a portion of each sign type exceeding reasonable size, as determined by UNM PDC. UNM PDC reserves the right to adjust final details, sizes, colors, materials and finishes to be incorporated in the production of the final signs. In no event shall any samples, whether approved or not approved, be permanently installed as part of the finished work.
- L. Samples for each type of finish material specified. UNM PDC review of samples will be for color and texture only. Compliance with all other requirements is the exclusive responsibility of Contractor. Samples will be kept by UNM PDC as a record to match against completed installation.
- M. Provide reproducible quality samples of the complete font, in all required typefaces, weights and sizes, prior to preparation of any artwork.

#### 1.4 Quality Assurance

- A. Source Limitations. All work shall be performed as a single-source, with the Sign Fabricator performing no less than 50% of the work in-house as Contractor.

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### PART IV FABRICATION REQUIREMENTS

- B. Contractor Qualifications
1. Documented experience with highly specialized custom fabrication, using the highest quality acrylic manufacturing.
  2. Proof of understanding of 2010 ADA *Standards for Accessible Design*.
  3. Experience using state-of-the-art machinery, fabrication, sign engineering and technology, and utilizing skilled craftsmen.
  4. Experience with thermoplastics, composites, LED, and UL/ETL, specialty silkscreen, high-quality spray paint techniques, specialty finishes, metal fabrication, electrical assemblies, and custom tactile & braille graphics.
  5. Utilization of computerized design, highest quality die-cut vinyl, digital graphics & printing.
  6. Experience and verifiable, successful track record with strategic phasing and critical time-line scheduling.
  7. Code compliance, permitting, site surveys and field analysis.
  8. Environmental Consideration. Consistent record of working with recycling contractors for scrap materials. Operating within or beyond regulatory standards with regard to safety and hazardous material handling and disposal.
- C. Contractor shall be experienced in producing signs similar to those of the UNM ISS with a record of successful in-service performance and sufficient production capacity to produce sign units required without causing delay in the determined schedule.
- D. Installer Qualifications. An authorized representative of signage manufacturer for installation and maintenance of units required for a project.
- E. Regulatory Requirements. Fully comply in all aspects with the ADA *Standards for Accessible Design 2010* (ADA SAD) and with code provisions as adopted by authorities having jurisdiction.

#### **Part 2 - Execution**

##### 2.1 Requirements

- A. Provide and install all work indicated in and according to all the requirements of the UNM ISS.
- B. Contractor to furnish, at their own cost and expense, all labor, materials, tools, expendable equipment and transportation services required to perform and complete the work described, in the best possible and most expeditious manner as presented within the UNM ISS.

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### PART IV FABRICATION REQUIREMENTS

- C. Where applicable, Contractor shall apply for and obtain, at his own expense, all permits necessary to complete the work described within the UNM ISS.
- D. The contractor shall take full responsibility for the correct and safe engineering and fabrication of all sign types, including production of Grade 2 Braille, and the manner in which the signage is supported and anchored and shall submit in the shop drawings all details which are necessary to result in a compliant, satisfactory and safe final product. The Contractor shall indemnify and hold harmless UNM PDC against any claim resulting from failure of, or damage caused by, the installed signs.
- E. Contractor shall take full responsibility for the effectiveness of all finishes, mechanical systems such as access doors, hinges, etc., The Contractor shall ensure all signs function effectively for their intended purpose under all expected environmental conditions. Contractor shall modify or replace, at their own expense, any signs which do not function satisfactorily.
- F. Contractor shall comply will all current codes and requirements of all relevant regulatory agencies, including ANSI, A117.1-1980 Section 4.30, the NMFA, State Fire Marshal, and any and all local and state codes.
- G. Contractor shall have all signs and structural bases engineered by a structural engineer specializing specifically in signage engineering, and registered in the State of New Mexico. The engineer will affix the seal noting structural worthiness.
- H. Contractor shall coordinate all installation details with UNM PDC.
- I. Fabricate and install sign types to withstand wind pressure of 100 mph on the total sign area in all directions.
- J. Provide paper mockups for all sign types, and affix to the wall at each sign location prior to final installation, and for review and approval by UNM PDC.

#### 2.2 Graphic Requirements

- A. All type setting must be exactly as specified including all details of typefaces and font suppliers. All UNM typefaces may be purchased solely from Adobe or Hoefler companies.

## Section A General Specifications

### PART IV FABRICATION REQUIREMENTS

- B. All photographically reproducible type required to be set by the Contractor shall be generated employing the highest quality digitized font with compatible spacing programs. All type that is generated digitally shall be set at a resolution of at least 1,200 dpi.
- C. For vinyl self adhesive characters, type or patterns shall generated using the latest, digital technology, and typefaces must match specified cuts exactly. In the event specified typefaces are not acceptable or unavailable, artwork may be digitized using equipment such as a 1,200 dpi scanner or approved equal. Contractor should be aware that in many instances Gerber versions of fonts may not satisfactorily match specified fonts and will not be allowed.
- D. All type not exceeding a capital height of 13mm shall be set full-size. All type with a finished size of at least 13mm, but not exceeding 26mm shall be set at least one-half full size. Type exceeding 26mm final size must be set at at least one-quarter full size.
- E. Typesetting shall have proper optical, letter, word and line spacing as specified in the UNM ISS and characters shall be sharp, accurately, optically aligned, and of consistent density.
- F. Installed work shall be accurately reproduced from the artwork. Characters with rounded positive or negative corners, nicked, cut or ragged edges, etc. will not be accepted. Specified margins shall be accurately maintained.
- G. Copy shown on any drawings is intended as a guideline for layout and type size only. Refer to the schedules for exact wording.
- H. All work shall be uniform in detail design and finish.
- I. Copy layout on the drawings and the wording indicated in the message schedule is based upon scale calculations within given and estimated areas. Should any conflict arise in the final copy layout, notify UNM PDC before proceeding. At no time shall size, number of lines of copy or specified letter, word and/or linespacing be modified to force copy to fit.
- J. UNM ISS contain non-reproducible quality art held by the UNM PDC. Contractor must apply to UNM PDC for any reproducible quality artwork prior to commencing fabrication. Under no circumstances shall anything within the ISS be used as reproducible

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### PART IV FABRICATION REQUIREMENTS

Artwork. All custom symbols, graphics, haptic font, and layouts are the property of UNM PDC and may not be reproduced or used for any other project outside UNM.

K. Manufacturer name, trade name or trade mark shall not appear on any visible surface of any sign or sign component. Where an Underwriter Laboratory, UL or any other label is required to be affixed to a sign it shall be placed in an inconspicuous location.

#### 2.3 Construction

- A. Field measure all conditions prior to fabrication. Where sizes of signs are determined by dimensions of surfaces on which they are installed, verify dimensions by field measurement before fabrication and indicate measurements on Shop Drawings.
- B. All work, including electrical work, shall be constructed as complete systems, including all stiffeners, fasteners, welding, sealants, jointing, miscellaneous pieces and material thicknesses, wiring, fittings, lamps, switches, circuits and connections required to enable the work to function properly.
- C. Advise UNM PDC of any significant discrepancies in field measurements or operational difficulties prior to fabrication. Obtain UNM PDC written approval for any resulting deviations from the specifications and/or drawings that may become necessary.
- D. Work shall be performed by competent workmen and shall be of the best quality, free from defects impairing strength, durability and appearance. All items shall be made of new materials.
- E. Contractor shall be experienced in producing signs similar to those in the UNM ISS with a clear record of successful, sustained, in-service performance and sufficient production capacity to produce sign units required without causing delay in the schedule.
- F. Connections, angles, shapes and details are suggestive and are to be sized, reinforced and detailed as required for their particular application. Details not shown are to be at least equal in quality to those detailed.
- G. Methods of fabrication, joining, finishing and installation of all components and work shall be according to the manufacturer instructions for the use of any products, materials, fittings and equipment used in construction.

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### PART IV FABRICATION REQUIREMENTS

H. All details of construction are to be engineered with appropriate strength materials and finished to withstand the potential rigors of the installed locations.

I. All work shall be uniform in detail design and finish.

#### 2.4 Delivery, Storage & Handling

A. Clearly label contents of all crates, internal packages by individual Sign Type, where applicable.

B. Deliver, store and handle all packages so as to protect them from any kind of damage. All stored sign components shall be kept indoors, free of potential dust, heat and/or cold, direct and indirect sun and weather exposure. At no time shall any sign components be stored outside for any period of time. Inspect all components for evidence of damage at storage site before installation. If installer is a subcontractor, to the contractor, installer shall confirm damage of any sign components upon receipt of delivery. Damaged materials shall not be incorporated into the work and shall be immediately removed from the site.

C. Contractor shall replace at his own expense all work judged damaged or defective before Substantial Completion.

#### 2.5 Installation

A. Install work in a well organized and timely manner. Whenever possible, work shall be installed as one continuous activity. Installation process shall be coordinated to accommodate the needs of UNM PDC.

B. Inform UNM PDC, at least one (1) week prior, to any intended installation and shall arrange, at UNM PDC convenience to have all patterns in place, and initial signs of each type ready for installation and approval on site before proceeding with the remainder of the installation. It is important such approval processes be organized efficiently to ensure approvals occur in a timely manner. Installer shall have all project and installation drawings and details, on site for reference during installation.

C. General Contractor or Contractor shall be responsible for the removal of existing or temporary signage at or near any location of the installation of new signs and repair all surfaces to original condition in the case of new or recently decorated surfaces.

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### **PART IV FABRICATION REQUIREMENTS**

- D. Where surfaces are not new or have not been recently decorated, within a period of 12 months, Contractor shall repair and make good all surfaces within an area extending 12" beyond the edge of any newly installed or removed sign or any other area damaged due to the work.
- E. Follow best practices and professional guidelines for installation. It is the responsibility of the Contractor to notify UNM PDC if there are any site or architectural conditions which will not provide for or permit a permanent, safe, fixed installation.
- F. No installation procedures or materials shall be used that will in any way change the visual quality or in any manner have an adverse effect on existing or new materials and surfaces.
- G. Protect all adjacent surfaces from damage during installation. Restore or replace any damaged surfaces to original condition and appearance.
- H. Install all signs at the locations and heights specified within the UNM PDC. All signs shall be installed level and plumb and where applicable, perpendicular to the surface upon which they are mounted, unless otherwise specified.
- I. Install signs on walls adjacent to latch side of door where applicable. Where not indicated or possible, due to side lights, glass wall, etc., install signs on nearest adjacent wall. Locate signs to allow approach within 4 inches of sign without encountering protruding objects or standing within swing of door.
- J. Wire all illuminated signs and connect same to a switched service located in a junction box provided by others within three feet of the location of the sign, unless otherwise specified.
- K. In the event an electrical service of adequate voltage, amperage, number of currents and switching has not been provided for any sign, notify UNM PDC immediately.
- L. Coordinate with the General Contractor or UNM PDC and arrange for electrical service to be turned on. Test and leave all illuminated signs in operating condition.
- M. Coordinate all scheduling and installation procedures with UNM PDC, General Contractor and others to avoid delays/additional costs. Coordinate time of delivery so that signs are installed within 24 hours of receipt at the project site.

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### PART IV FABRICATION REQUIREMENTS

- N. All work shall be provided with suitable protective coverings during shipment and installation. Remove and replace protective coating for inspection when requested. Final removal of protective coatings shall take place only when there is no danger of damage from further site work, and all protective coatings shall be removed simultaneously from similarly finished items to prevent uneven oxidation or discoloration.
- O. Remove packing and construction materials from the site. Leave premises broom clean and ready for work under other contracts or ready for use. Vacuum any carpets and spot clean where if necessary.
- P. Exposed surfaces of all work shall be left clean and free of glue, fingerprints, dirt, grease, dust, scratches or any other imperfections upon completion of installation.
- Q. Contractor shall be capable of providing replacement panels within 15 working days of receipt of an order.

#### 2.6 Maintenance

Before Substantial Completion, provide UNM PDC with two copies of clearly written instructions for proper maintenance of all work including electrical systems. Instructions shall address periodic cleaning, service access, painting, color specifications, re-lamping, replacement procedures, etc. Provide detailed troubleshooting and "what to check" lists for all customized electrical or mechanical systems.

#### 2.7 Warranty

Provide a two-year warranty of materials and workmanship for all work. Should defects appear within the warranty period, UNM PDC has the right to continue use of the defective work until necessary repairs are made or until such time that it is replaced. Replacements must fulfill completion of the outstanding warranty period. Warranty period begins at the date that a letter of Substantial Completion is issued.

### **Part 3 Materials & Construction**

#### 3.1 Acrylic Sheet

- A. Acrylic sheet shall be premium quality as manufactured by Röhm Plexiglass,<sup>®</sup> Du Pont, Lucite,<sup>®</sup> or approved equal.
- B. Edges of acrylic sheet components and any drilled holes shall be smooth and free of saw marks, chips, cracks or other blemishes and shall be square to the face.-as the UNM ISS Signage Program is manufactured entirely of acrylic, this will be strictly enforced.

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### PART IV FABRICATION REQUIREMENTS

All visible edges are to have consistent eased edges of 0.40 mm or 1/64". Flame polishing shall not be permitted.

- C. Laminated sheets and welded joints shall be free of gaps and bubbles and shall be continuously sealed and clear.
- D. Special care in the fabrication and installation of acrylic sheets shall be taken to prevent scratching, staining or other imperfections. Note that edge illumination will enhance any imperfections or scratches in the material.
- E. When there is no possibility of danger from other work to be performed, Contractor shall remove all protective coverings on acrylic sheet and shall remove any scratches using an approved acrylic polish. Remove all internal and external dust and other dirt and treat all surfaces with an anti-static polish on completion.
- F. Contractor shall provide UNM PDC with complete cleaning instructions recommended by acrylic manufacturer for safe cleaning and maintenance of acrylic sheets.

#### 3.2 Adhesives (including tapes)

- A. Adhesives required in fabrication and installation shall be compatible with the materials to be laminated or adhered.
- B. Surfaces onto which adhesives are to be applied shall be smooth, clean and free of any dust, dirt, grease, fingerprints or other foreign matter.
- C. Adhesives shall be guaranteed not to deteriorate, discolor, delaminate or fail in adhesion for any reason including exposure to heat, sunlight, weathering or other environmental conditions.
- D. Adhesives shall not change the color of, or in any way deteriorate, the materials to which they are being applied.
- E. Adhesive foam mounting tapes for permanent installation shall be premium quality double-sided acrylic foam tape such as manufactured by 3M or approved equal. Urethane foam tapes will not be allowed.
- F. Unless otherwise indicated, when used for permanent installation, adhesive foam mounting tape shall be 13mm wide and 1mm thick. Coverage shall be at least one continuous strip of tape at equal intervals. No tape shall be closer than 13mm from the edge of any component.

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### PART IV FABRICATION REQUIREMENTS

- G. Liquid adhesives shall be clear, ready-to-use, high performance, premium quality materials.
- H. Epoxy adhesives shall be two-component, thermal-setting, premium quality materials such as manufactured by Devcon, Two-Ton Epoxy, or approved equal.

#### 3.3 Aluminum

- A. Aluminum sheet and plate shall be ASTM B209, 3003 alloy, shop primed. Sheet and plate shall be of best architectural quality; stretcher levelled and visually flat.
- B. Aluminum for casting shall be certified Aluminum Association alloy designated B443.0 conforming to Federal Specifications QQ-A-601d or 11-A-596d.

##### 1. Aluminum, Individually Cut Letters

Aluminum, individually cut characters shall be cut from aluminum plate of the specified thickness. All edges shall be sandblasted to remove any cutting marks and shall be smooth, free from any saw marks or other blemishes and shall be square to the face. The front surface shall be finished as specified and the entire character shall receive a protective finish of two thin coats of clear lacquer.

##### 2. Aluminum, Pan Signs

- a. Aluminum pan signs shall be fabricated of aluminum sheet of sufficient thickness, and with any necessary internal reinforcement, to provide a sign surface which is stable and flat, and is free from 'oil canning' or other ripples or imperfections, as *seen in numerous projects throughout Albuquerque.* All corners or edge to edge joints shall be welded, unless otherwise specified, and shall be mechanically sanded after welding to provide a smooth exterior surface.
- b. Comply with AWS for recommended practices in shop welding. Provide welds behind finished surfaces without distortion or discoloration of the exposed side.
- c. Clean exposed welded surfaces of welding flux and dress on all exposed and contact surfaces.
- d. Mill joints to a tight, hairline fit. Form joints exposed to the weather to exclude water penetration.

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### PART IV FABRICATION REQUIREMENTS

- e. Preassemble panel signs in the shop to minimize field assembly. Disassemble signs only as necessary for shipping and handling limitations. Clearly mark units for assembly and installation, in a location not exposed to view after final assembly
- f. Conceal fasteners where possible, otherwise locate fasteners where shall be least conspicuous.
- g. Provide easily accessible panel for all illuminated signs.

#### 3.4 Aluminum Sheet Signs

Aluminum sheet signs shall be fabricated of aluminum sheet of sufficient thickness, and with any necessary internal reinforcement, to provide a sign surface which is stable and flat, and is free from 'oil canning' or other ripples or imperfections.

#### 3.5 Photopolymer Signs - ADA Tactile & Braille (*if applicable*)

- A. Polymer material to have aluminum-backed substrate per Jet® or equal.
- B. Etching depth to be a minimum of 1mm as required by ADA.
- C. All polymer signs to have eggshell finish & color to match background.

#### 3.6 Perforated Steel Sheet (*if applicable*)

Perforation dimension, .375" to center, round straight/90° pattern with symmetrical ends.

##### A. Chassis

- 1. Wall & Suspended: 18 ga cold rolled stainless steel with natural finish
- 2. Projecting Flag: 18 ga cold rolled stainless steel with natural finish

##### B. Module Attachment Installation Clip

All Tab manufactured to a tolerance of +/- 0.008 in.

- 1. PinTab™ Registration device used with high bond tape or other adhesive, injection molded black nylon.
- 2. PresTab™ Permanently mounted attachment, injection molded black nylon.

#### 3.7 Steel Sheet (*if applicable*)

Steel shall conform with ASTM and IO Standards for Sheet, Carbon, Structural, and High-Strength, Low-Alloy, Cold-Rolled Steel, General Requirements

## Section A General Specifications

### PART IV FABRICATION REQUIREMENTS

#### **Part 4 Illuminated Signage** *(if applicable)*

##### 4.1. General Requirements

- A. All wiring shall be concealed.
- B. All circuits shall be clearly and neatly labeled. Provide schematic diagrams and concise and clear operating instructions in the form of vinyl laminated plaques mounted inside appropriate access doors or at control points. Diagrams shall not be visible to the public.
- C. Illuminated components shall be constructed with an operable service panel, so lamps may be serviced.
- D. Light baffles and sealant shall be used where required to prevent light leaks from any part(s) of illuminated component.
- E. All areas of illuminated surface shall have even lighted surface with no evidence of hot spots, shadows, scallops, halos or reflections.
- F. All lamps shall be of sufficient number, wattage, and color to effectively illuminate sign surface in the intended location and for the intended function.
- G. Provide adequate insulation and means of ventilation for all lamps or other electrical equipment incorporated into components to prevent the possibility of fire or deforming or defacing of any materials due to overheating. All means of ventilation will be designed to eliminate any possibility of visible light leaks or light spill onto adjacent surfaces.

#### **Part 5 Finishes**

##### 5.1 Ink, Paint & Varnish

- A. Comply with NAAMM "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. All colors shall be exactly reproduced as specified and shall match submitted samples.
- C. All paint coatings to be polyurethane from Matthews Paint.  
For exposed sign material that requires selection of materials with integral or applied colors, surface textures or other characteristics related to appearance, provide color match.
- D. Interior signs shall be executed with an eggshell finish polyurethane paint from Matthews Paint. Use manufacturer directions for paint application.

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- E. All paint shall be applied using a high pressure spray in dust-free conditions and shall be allowed to dry or cure properly before being moved.
- F. Painted surfaces and other applied finishes shall have a smooth, even finish and be free of imperfections, marks, scratches, embedded dirt, wave patterns or other irregularities.
- G. Appearance of Finished Work. Paint required in fabrication, including paint for lettering, screened copy, subsurface copy, etc. shall be compatible with the materials to which it is applied and guaranteed not to cause discoloration, or deterioration for any reason, including exposure to heat, sunlight, weathering or other environmental conditions. Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of range of approved Samples. Noticeable variations in same piece are not acceptable. Variations in appearance of other components are acceptable if they are within range of approved Samples and are assembled or installed to minimize contrast.
- H. Protect mechanical finishes on exposed surfaces from damage by applying strippable, temporary protective covering before shipping.
- I. Paints shall be precisely identified on shop drawings and submitted samples.
- J. Prime coats or other surface pre-treatments, where recommended by the manufacturer of the paint, shall be included in the work.

#### 5.2 Silkscreen (*if applicable*)

- A. Silkscreen shall be made using photographic film positives. Hand-cut positives may not be used except in exceptional circumstances and only with UNM PDC prior approval in writing. If hand-cut positives are allowed, they shall be of equivalent quality to photographic film.
- B. Ink finish shall be non-glare, 'eggshell' per ADASAD.

#### **Part 6 Graphics**

All graphics to be fabricated using ISO 9001 manufacturing process for vinyl graphics or direct UV cured digitally printed graphics with a finish of a high temperature cured polyester.

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### PART IV FABRICATION REQUIREMENTS

#### **Part 7 Vinyl**

##### 7.1 Vinyl Self-Adhesive Characters

Vinyl self-adhesive characters shall be accurately cut from vinyl self-adhesive film. All characters shall be pre-spaced on adhesive carrier paper which will allow for their accurate positioning before installation.

##### 7.2 Vinyl Self-Adhesive Film

A. Vinyl self-adhesive film shall be fabricated from a premium grade adhesive vinyl film of between .003" and .005" thickness such as that manufactured by 3M, ScotchCal, or approved equal.

B. When applied, vinyl self-adhesive film shall withstand exposure to weather conditions with no appreciable deterioration such as cracking, blistering, or loss of adhesion.

C. Vinyl self-adhesive film shall be dimensionally stable. Characters shall not shrink more than .2mm and sheet signs shall not shrink more than 2mm from any edge after installation.

#### **Part 8 Mounting Devices**

##### 8.1 Fasteners (*if applicable*)

A. Use concealed fasteners fabricated from metals that are not corrosive to the sign material and mounting surface.

B. See 3.2 Infinity™ with Chassis, B Module Attachment Installation Clip for sign panel fasteners mounted onto chassis.

##### 8.2 Anchors & Inserts (*if applicable*)

Use nonferrous metal or hot-dipped galvanized anchors and inserts for exterior installations and elsewhere as required for corrosion resistance. Use toothed steel or lead expansion bolt devices for drilled in place anchors. Furnish inserts, as required, to be set into concrete or masonry work.

##### 8.3 Brackets (Sign Type F, Flag Mount ID)

A. Fabricate brackets and fitting for bracket-mounted signs from extruded aluminum to suit sign panel construction and mounting conditions indicated. Factory paint brackets in a color matching the background color of the sign panel.

B. Provide the manufacturer standard brackets, fittings and hardware as appropriate for mounting signs that project from walls. Attach brackets and fittings securely to walls or ceilings with concealed fasteners and anchoring devices to comply with manufacturer's directions.

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### PART IV FABRICATION REQUIREMENTS

#### **Part 9 Bidding Instructions** *(when applicable)*

##### 9.1 General Instructions

- A. Drawings are for concept only. Contractor shall be responsible for making a product which meets the requirements of both the specifications and the drawings, and which works effectively, efficiently and safely.
- B. If there is a conflict, stated dimensions on the Drawings shall take precedence over scaled dimensions. Should a Bidder find discrepancies in, or omissions from, the contract documents, or be in doubt as to their meaning he shall notify UNM PDC at once. If it should be found necessary, a written addendum will be sent to each Bidder. UNM PDC shall not be responsible for oral instructions.
- C. Failure to request clarification of any inadequacy, omission or conflict will not relieve the Contractor of responsibility. The signing of the contract will be considered as implicitly denoting that the Contractor has a thorough comprehension of the full intent and scope of the contract documents.
- D. It shall be assumed that the Contractor has inspected the site and is aware of all site and operational conditions affecting the fabrication and installation of the work. No extra charges shall be claimed or allowed due to a failure of the Contractor from making such inspections.
- E. The Contractor shall be responsible for assuring that there are no pricing or tabulation errors in submitted bids and shall not make any claims for extra payment as a consequence of any such errors.

##### 9.2 Pricing Information

Contractor shall furnish cost information for future purchases, guaranteed for two years from the date of this contract, for all sign types listed in the pricing schedule. Information shall include costs for items ordered individually as well as minimum order requirements in order to obtain optimum price breaks. Cost information shall not include wayfinding and 'design' unless explicitly listed as such.

##### 9.3 Fabrication & Installation Schedule

Contractor shall furnish a schedule indicating number of weeks required from contract signing to commencement of installation, and number of weeks required for completing installation process. If necessary, separate information may be provided by sign type, or as specified by UNMPDC.

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### **PART IV FABRICATION REQUIREMENTS**

#### 9.3 Manufacturers

A. Available manufacturers: Subject to compliance with requirements, manufacturers offering products that shall be incorporated in the final deliverable include, but are not limited to, the following:

1. Modulex, Modulex Americas Inc.

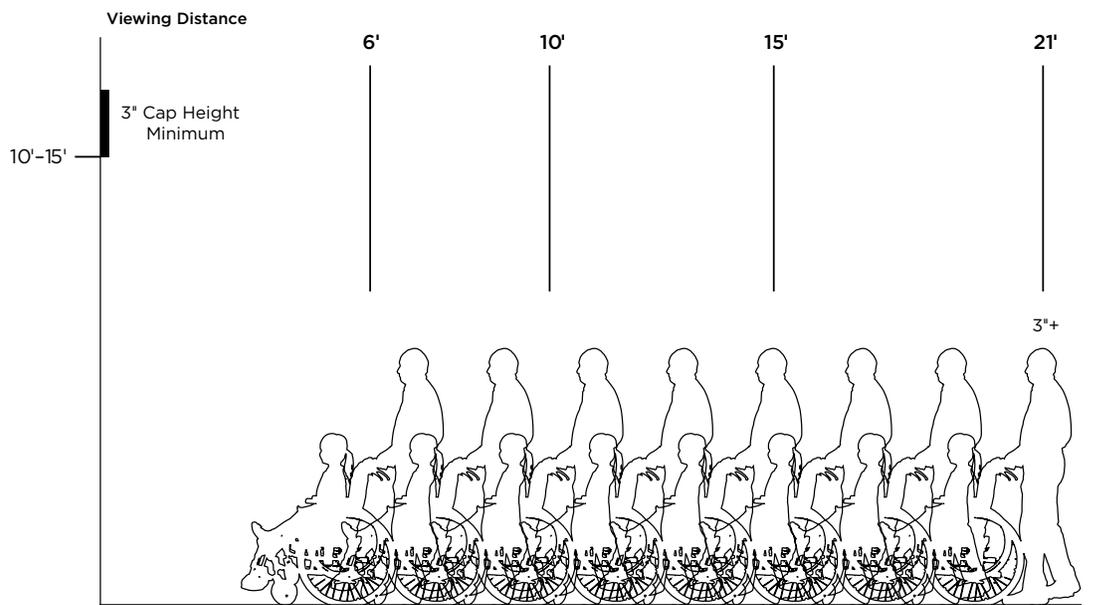
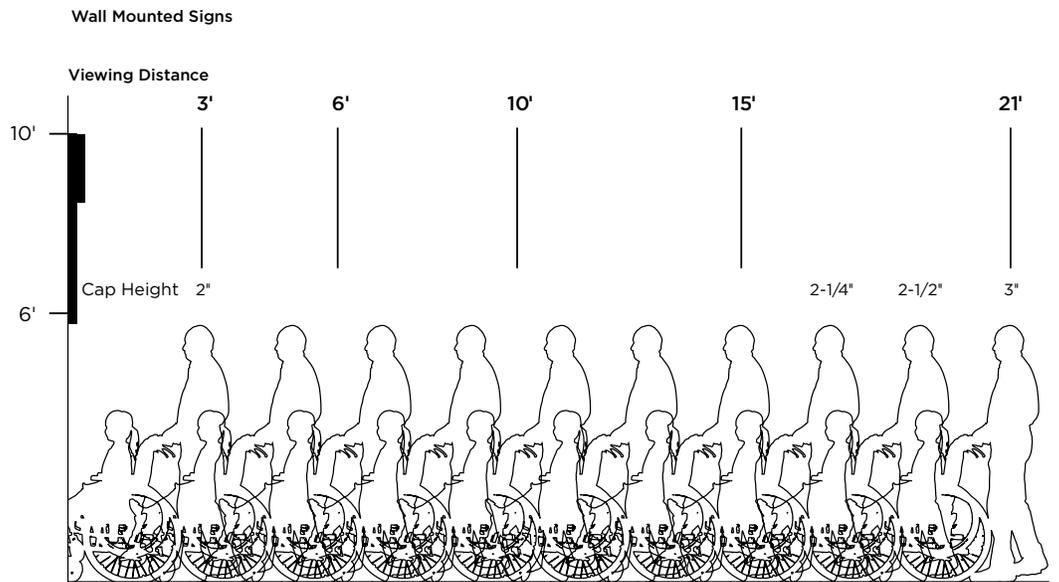
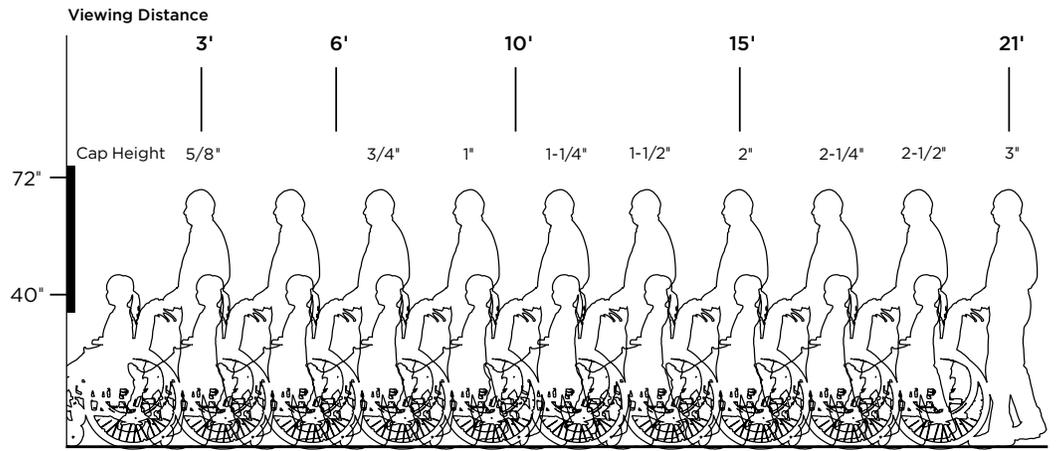
1001 Brickell Bay Drive, 27 Floor, Ste 2704, Miami, FL 33131  
305 503 7737 305 569 6698 fax mxusa@modulex.com

2. ASI Signage ASI, Corporate

8181 Jetstar Drive, Ste 100, Irving, TX 75063  
214 352 9140 214 352 9741 fax www.asisignage.com

## Section A Legibility & Viewing Distance

**PART V  
APPENDIX**



## Section B Americans with Disabilities Act

### PART V APPENDIX

#### ***ANSI & ADA Standards for Accessible Design***

The Uniform Federal Accessibility Standards, UFAS, American National Standards Institute, ANSI, and Americans with Disabilities, ADA, focus on access: accessible routes, paths of travel, travel distances, and access connections.

The standards define the minimum standards for compliance for everyone. Within a building, 'pedestrians,' include people using any means of transport to navigate a building. The standards also address people with visible and invisible cognitive and motor abilities. In many cases, aside from age, a persons immediate capacity to interpret and navigate an environment, in which case, assumptions about a 'disability' must be avoided.

#### **The NEW ADA**

The Department of Justice published revised regulations in 2010, which include the Standards for Accessible Design. As of March 15, 2012 the 'ADA Standards' became mandatory and must have been updated by this date regardless of the previous 'renovation' triggers. The State Office of Accessibility receives complaints from users, and has sited facilities in Albuquerque for accessibility issues. The cost for lack of compliance in signage with the Department of Justice has been documented at \$75,000 per incident.

#### **Rules of the 'Road-Standards Defined**

##### ***Accessible Routes***

##### *Path of Travel*

2010 Standards for state and local government facilities: Title II 28 CFR 35.151 (b) (4) (ii)

A "path of travel" includes a continuous, unobstructed way of pedestrian passage by means of which the altered area may be approached, entered, and exited, and which connects the altered area with an exterior approach (including sidewalks, streets, and parking areas), an entrance to the facility, and other parts of the facility.

(A) An accessible path of travel may consist of walks and sidewalks, curb ramps and other interior or exterior pedestrian ramps; clear floor paths through lobbies, corridors, rooms, and other improved areas; parking access aisles; elevators and lifts; or a combination of these elements.

## Section B Americans with Disabilities Act

### PART V APPENDIX

(iv) Duty to provide accessible features in the event of disproportionality. (A) When the cost of alterations necessary to make the path of travel to the altered area fully accessible is disproportionate to the cost of the overall alteration, the path of travel shall be made accessible to the extent that it can be made accessible without incurring disproportionate costs.

(B) In choosing which accessible elements to provide, priority should be given to those elements that will provide the greatest access, in the following order—

- (1) An accessible entrance;
- (2) An accessible route to the altered area;
- (3) At least one accessible restroom for each sex or a single unisex restroom;
- (4) Accessible telephones;
- (5) Accessible drinking fountains; and
- (6) When possible, additional accessible elements such as parking, storage, and alarms.

(v) Series of Smaller Alterations.

(A) The obligation to provide an accessible path of travel may not be evaded by performing a series of small alterations to the area served by a single path of travel if those alterations could have been performed as a single undertaking.

(c) Accessibility Standards and Compliance Date.

(1) If physical construction or alterations commence after July 26, 1992, but prior to the September 15, 2010, then new construction and alterations subject to this section must comply with either the UFAS or the 1991 Standards except that the elevator exemption contained at section 4.1.3(5) and section 4.1.6(1)(k) of the 1991 Standards shall not apply. Departures from particular requirements of either standard by the use of other methods shall be permitted when it is clearly evident that equivalent access to the facility or part of the facility is thereby provided.

(2) If physical construction or alterations commence on or after September 15, 2010, and before March 15, 2012, then new construction and alterations subject to this section may comply with one of the following: the 2010 Standards, UFAS, or the 1991 Standards except that the elevator exemption contained at section 4.1.3(5) and section 4.1.6(1)(k) of the 1991 Standards shall not apply. Departures from

## Section B Americans with Disabilities Act

### PART V APPENDIX

particular requirements of the standards by the use of other methods shall be permitted when it is clearly evident that equivalent access to the facility or part of the facility is thereby provided.

(3) If physical construction or alterations commence on or after March 15, 2012, then new construction and alterations subject to this section shall comply with the 2010 Standards.

(4) For the purposes of this section, ceremonial groundbreaking or razing of structures prior to site preparation do not commence physical construction or alterations.

(5) Noncomplying new construction and alterations.

(i) Newly constructed or altered facilities or elements covered by §§ 35.151(a) or (b) that were constructed or altered before March 15, 2012, and that do not comply with the 1991 Standards or with UFAS shall before March 15, 2012, be made accessible in accordance with either the 1991 Standards, UFAS, or the 2010 Standards.

(ii) Newly constructed or altered facilities or elements covered by §§ 35.151(a) or (b) constructed or altered before March 15, 2012 and that do not comply with the 1991 Standards or with UFAS shall, on or after March 15, 2012, be made accessible in accordance with the 2010 Standards.

#### *Building Egress*

Each accessible means of egress shall be continuous to a public access way.

#### *Building Access*

A percentage of building entrances to be accessible.

Accessible Routes shall coincide with route for general public. Accessible path of travel is required between sidewalk and building entrance.

#### *Building Entrances*

If all entrances are accessible, access symbol is not required. Legible signage with a map and directions must be provided to nearest accessible entrance. ANSI 703

#### *Parking*

2% cross slope every direction. Curb ramps: 303.4 Ramps.

Changes in level greater than (13 mm) high shall be ramped, and shall comply with 405 or 406.

## Section B Americans with Disabilities Act

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#### *ANSI 406 Detectable Warnings*

Detectable warnings are required if the following conditions exist:

1. Marked crossings raised to same level as adjoining sidewalk.
2. Islands or cut-through medians
3. Edge of transportation platforms

Ramps over 1:20 require handrails, a 72" length ramp with more than 6" grade/rise may not exist for any accessible route.

#### *ANSI 304.2 Floor or Ground Surfaces.*

Floor or ground surfaces of a turning space shall comply with 302. Changes in level are not permitted.

EXCEPTION: Slopes not steeper than 1:48 shall be permitted.

*Advisory 304.2 Floor or Ground Surface Exception. The phrase "changes in level" refers to surfaces with slopes and to surfaces with abrupt rise*

*exceeding that permitted in Section 303.3. Such changes in level are prohibited in required clear floor and ground spaces, turning spaces, and in similar spaces where people using wheelchairs and other mobility devices must park their mobility aids such as in wheelchair spaces, or maneuver to use elements such as at doors, fixtures, and telephones. Exception permits slopes not steeper than 1:48.*

#### *305.6 Approach.*

One full, unobstructed side of the clear floor or ground space shall adjoin an accessible route or adjoin another clear floor or ground space.

#### 2010 Standards for Titles II and III Facilities

2004 ADAAG

#### *103 Equivalent Facilitation*

Nothing in these requirements prevents the use of designs, products, or technologies as alternatives to those prescribed, provided they result in substantially equivalent or greater accessibility and usability.

#### *Advisory 103 Equivalent Facilitation*

The responsibility for demonstrating equivalent facilitation in the event of a challenge rests with the covered entity. With the exception of transit facilities, which are covered by regulations issued by the Department of Transportation, there is no process for certifying that an alternative design provides equivalent facilitation.

## **Section B Americans with Disabilities Act**

### **PART V APPENDIX**

#### *204 Protruding Objects 204.1 General*

#### *307 Protruding Objects, 307.1 General.*

Protruding objects on circulation paths shall comply with 307.

#### *307.2 Protrusion Limits*

Objects with leading edges more than 27 inches (685 mm) and not more than 80 inches (2030 mm) above the finish floor or ground shall protrude

4 inches (100 mm) maximum horizontally into

the circulation path. Exception: Handrails shall be permitted to protrude 4.5" (115 mm) maximum.

#### *Advisory 307.2 Protrusion Limits*

When a cane is used and the element is in the detectable range, it gives a person sufficient time to detect the element with the cane before there is body contact. Elements located on circulation paths, including operable elements, must comply with requirements for protruding objects. For example, awnings and their supporting structures cannot reduce the minimum required vertical clearance. Similarly, casement windows, when open, cannot encroach more than 4 inches (100 mm) into circulation paths above 27 inches (685 mm).

#### *307.3 Post-Mounted Objects.*

Free-standing objects mounted on posts or pylons shall overhang circulation paths 12 inches (305 mm) maximum when located 27 inches (685 mm) minimum and 80 inches (2030 mm) maximum above the finish floor or ground. Where a sign or other obstruction is mounted between posts or pylons and the clear distance between the posts or pylons is greater than 12 inches (305 mm), the lowest edge of such sign or obstruction shall be 27 inches (685 mm) maximum or 80 inches (2030 mm) minimum above the finish floor or ground.

Exception: The sloping portions of handrails serving stairs and ramps shall not be required to comply with 307.3.

#### *307.4 Vertical Clearance.*

Vertical clearance shall be 80 inches (2030 mm) high minimum.

Guardrails or other barriers shall be provided where the vertical clearance is less than 80 inches (2030 mm) high. The leading edge of such guardrail or barrier shall be located 27 inches (685 mm) maximum above the finish floor or ground.

## Section B Americans with Disabilities Act

### PART V APPENDIX

#### *206 Accessible Routes 206.1 General.*

Accessible routes shall be provided in accordance with 206 and shall comply with Chapter 4.

#### *206.2 Where Required.*

Accessible routes shall be provided where required by 206.2.

#### *206.2.2 Within a Site*

At least one accessible route shall connect accessible buildings, accessible facilities, accessible elements, and accessible spaces that are on the same site.

Exception: An accessible route shall not be required between accessible buildings, accessible facilities, accessible elements, and accessible spaces if the only means of access between them is a vehicular way not providing pedestrian access.

#### *206.2.3 Multi-Story Buildings and Facilities*

At least one accessible route shall connect each story and mezzanine in multi-story buildings and facilities. Exceptions:

2. Where a two story public building or facility has one story with an occupant load of five or fewer persons that does not contain public use space, that story shall not be required to be connected to the story above or below.
7. Where exceptions for alterations to qualified historic buildings or facilities are permitted by 202.5, an accessible route shall not be required to stories located above or below the accessible story.

#### Signage

#### *Room Designation Advisory 216.2 Designations.*

Section 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: interior signs labeling restrooms, room and floor numbers 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, do not require text descriptors.

#### *703.5.6 Height From Finish Floor or Ground*

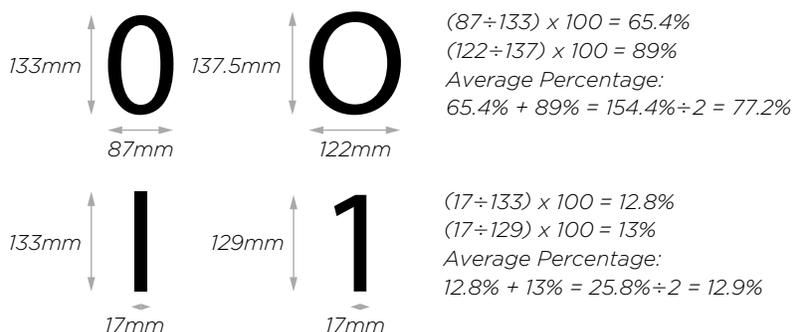
Visual characters shall be 40 inches (1015 mm) minimum above the finish floor or ground.

## Section B Americans with Disabilities Act

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#### 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. (based on distance)

#### 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.

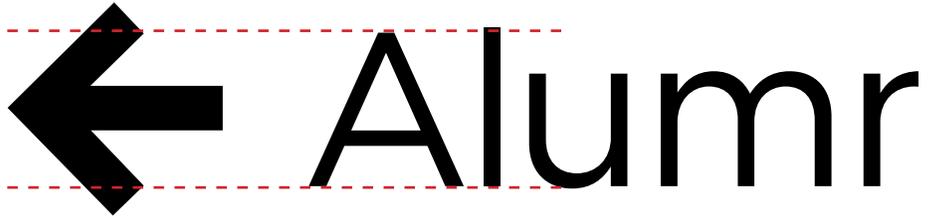
#### 703.6.2, 703.7.1 Finish & Contrast

Symbols and their field shall have a non-glare finish. Symbols shall contrast with their field with either a light symbol on a dark field or a dark symbol on a light field. 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.

Best Practices suggests a light symbol or lettering on a dark field is more legible as there is less 'haloing.'

Section C Sign Graphics Specifications

PART V  
APPENDIX



*D1, D2 Directional Signs*  
Arrow shall align with cap height as shown. Arrow size is based on inner arrow 'wing' aligning with cap height of non curved letters. Curved letters include: CGJOQSU.



*D1, D2 Directional Signs*  
Symbols shall align with bottom of non curved letter as shown. Symbol size is 123% larger than cap height. Spacing between text and symbol is equal to width of letter "n".



*All Signs*  
Left alignment of text is based on OPTICAL alignment. Curved letters: CGJOQSU, as well as letters with angled, non vertical stroke will align optically exceeding the left margin as shown. The only letters which align flush to the left margin are vertical stroke letters. Same applies for curved and vertical symbols, arrows, etc. Sample illustrates proper letter spacing.