SIGNING AND GRAPHICS STANDARDS

Duluth Version:
University of Minnesota
Signing and Graphics Standards

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INTRODUCTION

This manual consists of modifications to the University of Minnesota Signing and Graphics Standards made by the University of Minnesota Duluth campus as approved by Facilities Management Engineering Support Services. Because of the interconnectedness of the UMD campus, several changes needed to be made to the sign standards to facilitate the overall goals of the University of Minnesota Duluth.

The University of Minnesota recognized the importance of coordinating and standardizing the interior and exterior signing throughout the Twin Cities and coordinate campuses, when the first signing standards developed in 1977.

Today, the value of this area of design continues to be accepted as an essential component of facility planning and design.

Specifically the goals of the signing standards are:

- To provide a system of visual orientation for students, faculty, staff, and visitors to the University
- To provide consistency in design and quality from building to building
- To provide a framework that departments must use in executing their identification needs
- To lend efficiencies in expediting signing programs through Facilities Management Systems Support

It is recognized that these signing standards address only those items that are consistently used on a campus-wide basis. The need for non-standard and specialized signing applications will always exist. For these situations, the signing standards can also provide a guideline for the development of adjunct signing components.

The signing standards are therefore planned to be continually monitored and updated, allowing them to change with new developments in manufacturing techniques, building codes, and design trends. Changes and modifications to these standards are reviewed and recommended by UMD Facilities Management.
HOW TO USE THIS MANUAL

Signs are an essential element in directing people to their destinations. Effective signs rely on visibility, readability, noticability and legibility. Specifying properly sized and located signs as well as editing your messages for clarity, greatly increases the effectiveness of your signage.

Effective signage also includes accessible signage, which is accomplished by identifying the purpose of individual signs and determining whether or not either the Minnesota Accessibility Code chapter 1341 or the Americans with Disabilities Act (ADA) affects the sign.

Signs can inform, direct, identify and regulate. Once the purpose of the sign has been determined refer to the table of contents to find the appropriate sign type. The specifics accompanying each sign type will help to define the proper sign type for each need.

An important concept in sign system planning is that the quantity of text to be displayed should not exclusively dictate the size of the sign. Rather, signs with like messages should be grouped, a common size module selected, and the resulting sign type used consistently, regardless of the variation in individual text quantity.

To provide flexibility in developing informational signing, a group of generic modules are included within this collection.
THE SIGN SYSTEM

- Interior Sign System

1. IDENTIFICATION SIGNS
   a. PERMANENT
      i. Suite/Room
      ii. Specialty Classrooms
      iii. Auditoriums
      iv. Miscellaneous
      v. Facilities
   b. TEMPORARY
      i. Suite/Room
      ii. Offices
      iii. Multi-use Rooms

2. DIRECTION/WAYFINDING SIGNS
   a. OVERHEAD
   b. WALL-MOUNTED

3. INFORMATION SIGNS
   a. DIRECTORIES
   b. MISCELLANEOUS (HOURS, INSTRUCTIONS, ETC.)

4. REGULATORY/ LIFE SAFETY SIGNS

- Exterior Sign System

1. IDENTIFICATION SIGNS
   a. CAMPUS
   b. BUILDING

2. DIRECTION
   a. PEDESTRIAN
   b. VEHICULAR

3. INFORMATION SIGNS
   a. PARKING
   b. MISC (HOURS, INSTRUCTIONS, ETC.)

4. REGULATORY
   a. ACCESSIBLE
   b. TRAFFIC CONTROL
   c. PARKING

There is inter-relatedness in graphic format and configuration. These consistencies promote a graphic image that becomes recognizable from building to building and throughout the campus. It is this familiarity that assists the viewer in obtaining information quickly and in orderly progression.
ADA GUIDELINES

The Americans With Disabilities Act went into effect on January 26, 1992. This became a landmark civil rights law that entitles disabled people to the same rights and access as other Americans but affects us all. Signage guidelines have been established as a result of this law, an outline of which has been compiled here. In general, signs that designate permanent rooms and spaces, and signs that provide direction or information about functional spaces of the building are affected by the ADA guidelines. The state of Minnesota has also passed the Minnesota Accessibility Code, chapter 1341, which signage must comply with. Specific examples are listed below as a guide to help determine whether or not a specific sign must be compliant. See http://www.state.mn.us/ebranch/admin/buildingcodes/rules/rules.html

● ACCESSIBILITY/ INTERIOR SIGN SYSTEM

**Identification Signs**
Permanent spaces require signs that have a tactile message and accompanying Grade II Braille. When identifying a permanent facility such as a restroom, a pictogram must appear in addition to the message to identify whether or not the space is accessible. It is University of Minnesota policy to identify all spaces with a tactile suite number.

**Direction/Wayfinding Signs**
Overhead/protruding direction signs require a minimum character height of 3" lower case can be used and Braille characters are not required. Overhead and right angle signs must allow minimum clear headroom of 80". Wall mounted direction signs must comply with character proportion, height, finish and contrast guidelines. Lowercase is acceptable and Braille is not required.

**Information Signs**
Directories and miscellaneous information signs, as a rule, are not affected by ADA guidelines.

**Regulatory/Fire Safety Signs**
The International Symbol of Accessibility shall appear on all accessible facilities (restrooms, auditoriums, etc.) and should mark the accessible path to those facilities if not readily evident.

● ACCESSIBILITY/ EXTERIOR SIGNS

Signing of facilities that are only partly accessible, as well as elements and spaces of accessible facilities (accessible by disabled persons) which shall be identified by International Symbols of Accessibility (appropriate pictograms such as wheelchair, TDD symbol etc.) are
- Parking spaces designed as reserved for individuals with disabilities.
- Accessible passenger loading zones.
- Accessible entrances when not all are accessible.

(Note: Inaccessible restrooms, locker rooms, and entrances to facilities shall have directional signage to indicated the route to the nearest accessible entrance. For inaccessible exterior entrances see sign types EXE 5-7).
ADA GUIDELINES (CONTINUED)

ACCESSIBLE SIGNAGE REQUIREMENTS

- **Room signage:**
The University of Minnesota’s interpretation of the MN Accessibility Code 1341 is that intent of the law is to have the “official” designator of a room comply with 1341.0476. In the University system, most rooms are designated by their room number, not by a name. The room number is required to meet all requirements of the MN Accessibility Code.

In this signage and graphics standard we have decided to add additional information to the sign plate holding the basic accessibility information. As the MN Accessibility Code 1341 does not require this information, we have tried to add the information in the most aesthetically pleasing way. We decided to add that information in Grade II Braille that would be most beneficial to our sight impaired community.

- **Additions to the signage:**
  
  **Building names:** The building names will be added to the lower plate of our signs. To follow our standard naming convention, the name will be in initial upper case / lower case format. In the event that the entire approved building name is unable to fit in the designated area, the approved abbreviation will be used. As a help to our sight-impaired community this information will be included with the required room number designator in grade II Braille.

  **Room Names:** Generic names such as “Classroom” or “Laboratory” have been added to some signs as auxiliary information to help confirm the right location. These names will be added in initial upper case / lower case format to the top plate of the sign. More descriptive generic names such as “Soils Laboratory” will also follow this standard. Rooms that have specific names that are not going to change such as “Romano Gym” shall be written in raised text, initial upper case / lower case format to the top plate of the sign with grade II Braille at the bottom of this plate as a help to our sight impaired visitors.

  **Restrooms:** Restrooms are not known by a room number and therefore the bottom plate shall follow MN Accessibility Code 1341 for the “MEN” / “WOMEN” text. Building names are not added to restroom signage.

  **Exit Stairwell:** Stairwells are not known by a room number and therefore the “STAIRWELL X” text on bottom plate shall follow MN Accessibility Code 1341. Building names are to be added in the same format as described above. The top plate shall have raised letters with grade II Braille at the bottom of this plate.

Scott Holm, building code inspector, approved this page on February 20, 2002.
GENERAL SPECIFICATIONS

INTERIOR SIGN SYSTEM

Raised Characters:
- Letters and numbers shall be raised a minimum of 1/32", san serif or simple serif typestyle (e.g. Helvetica or MS Sans Serif fonts).
- Raised characters must be 5/8" high but not more than 2" high. An eggshell or matte finish is recommended.
- Character proportions shall have a height to width ratio between 3:5 and 1:1 and a stroke width to height ratio between 1:5 and 1:10.
- Contrast between characters and background must be at least 70% (Contrast = [B1-B2]/B1) X 100 where B1=light reflectance value (LRV) of the darker area.
- Attached so as tamper-resistant

Braille Characters:
- Must be Grade 2. Standard dimensions for literary Braille are:
  - Dot Diameter (0.59")
  - Inter-dot Spacing (.090")
  - Horizontal separation between cells (.395")

Pictograms:
- Pictograms shall be accompanied by the equivalent verbal description place directly below the pictogram.
- The border dimension of the pictogram shall be 6” minimum in height.
- Any descriptive or Braille translation must not be within the 6” pictogram field. -- Pictograms need not be raised.

Overhead or Protruding Signs
- All overhead signs must be mounted at least 80" from the bottom of sign to the floor.
- Lettering to be 3” (per ADA requirement)
- See “Notes for ‘G Style’ Signage” near the end of this document for more detailed specifications

Wall Mounted Signs
- Must be mounted 60 inches from the floor to the center of the sign, on the wall adjacent to the latch side of the door.
- When there is no wall adjacent to the latch side of the door, or in the case of double doors, the signs are to be placed on the nearest adjacent wall.
- People reading the sign must be able to stand within 3 inches of it without hitting anything or coming within the swing of the door.

(The University of Minnesota, because of the large variety of sign sizes and shapes, recommends a consistent mounting height of 66 inches from the floor to the top of the sign. This effectively puts the message at a consistent height and contributes to the uniform appearance of signs in a corridor.)

(Note: Wall-mounted directional/wayfinding signage and directories are to be located individually based on existing conditions.)
GENERAL SPECIFICATIONS (CONTINUED)

GENERAL
A) The requested work will be expected to comply with all Federal and State laws, codes and regulations, and all municipal ordinances or regulations in effect at the time the work is to be performed.
B) Materials listed shall be new, free from defects impairing strength, durability or appearance.

MATERIALS
A) Metals
1. Thickness, size, type and seam placement as specified on drawings.
2. Steel sheet must be paint-lock or galvanized. All edges of metal or aluminum shall be cut to a continuous sharp even line and finish sanded smooth.
3. Aluminum sheet to be #5052 alloy.
4. All seams to be straight and symmetrical.

B) Fastenings
1. All screws, nuts, bolts and fastening devices shall be of aluminum, stainless steel or cadmium plated non-corrosive material.
2. All anchorage and fastenings of miscellaneous metal items shall be structurally adequate and finished to match surface.

C) Electrical
1. Electrical parts and materials shall be in accordance with national electrical codes, applicable local codes, and the requirements of the Under Writers Laboratory, Inc., and should be so labeled.
2. Suitable and approved disconnect switches shall be provided under this work. Location shall be as inconspicuous as possible and approved by the U of M or designee.
3. Electrical service will be provided as specified under Electrical Section to the points and at the voltage shown on the Electrical Drawings. Extensions of wiring, conduit and transformation of voltages, if required, and final connections shall be a part of the section. Verify exact location of existing stubs and junction boxes, by reference to drawings and site constructions.
4. All signs shall provide an evenly distributed lighted surface equal to an intensity hereinafter specified. All of lighted letters shall be of equal intensity and shall be the same as all other letters in each sign.

E) Flexible Materials
1. Thickness, color, size, seam placement and brand name as specified on attached drawings.
2. All fastening devices to meet dealer recommendations. Seam placement to be straight and symmetrical.

F) Coatings and Finishes
1. All aluminum, metal and fasteners shall be finish coated with an appropriate printer and color coat with corrosion inhibitors guaranteed for four (4) years against fading, chipping, cracking, peeling and discoloration. Color as required per specification drawings.
2. All flexible face coatings shall be guaranteed for (8) years against fading. Discoloration and mildew.
3. All holes, penetrations and cut edges of pre-finished metals and aluminum must be free of burrs, primed and painted to maintain a corrosion proof finish.

G) Miscellaneous Materials
1. Hardware - Any metal devices used for contraction not previously covered shall be of a stainless steel, aluminum, or steel with galvanized coating.
2. Wood, Alucobond, fiberglass, brick, stainless steel or any other material must be of top grade quality as required on drawings.

5. All electrical parts shall be new and free of defects.
6. Signs shall be complete with all necessary lamps, tubes, ballasts, transformers, sockets and internal wiring as required for complete operable units.
7. All light sources shall be of outdoor type: all ballasts to be 800 Ma. outdoor type rated for -20 F. Transformers to be 30 Ma. or 60 Ma. outdoor type as specified on drawings.
GENERAL SPECIFICATIONS (CONTINUED)

LABOR
A) General
Any work required under this section that is not described in detail shall be constructed in accordance with approved shop drawings.

B) Accuracy of Work
All work shall be fabricated and erected square, plumb, straight and true. Cut-out letters, numbers and images shall be cut to continuous, sharp even line of profile as indicated on drawings. Provide all supporting and anchoring means as required for proper installation. All curved areas to be true, no kinks or creases, oil canning or dimpling will be accepted.

C) Material Thickness
Sheet materials and sampling shapes shall be of thickness recommended by sign fabricator to produce straight or evenly curved surfaces, free from waviness, wrinkles or other deformation except as otherwise herein specified or indicated on the drawings.

D) Exposed Metal Surfaces
Exposed metal surfaces shall be reinforced, braced and securely fastened to provide rigid assembly. Sign facts shall be free of all holes except those required to install letters or weep holes. Service access doors shall be concealed wherever possible. Flush-butt locked seams and fillers shall be metal screwed and bolted on filler edges to provide smooth faces free of unsightly rivets. All steel items exposed to the weather and all other steel items as indicated or specified shall be galvanized or ground and painted with zinc-chromate primer and finish coat.

E) Exposed Joints
Exposed joints shall be continuously welded, ground and polished smooth and shall not be visible. Mitered corners shall be snug, neat and tight fitting in an even, smooth plane.

F) Exterior Cabinets and Frames
Exterior cabinets and shall be fastened with stainless steel screws, tamper-resistant flat head countersink, or nuts and bolts as indicated. The inside of exterior signs shall be rainproof. Signs shall be provided with weep-holes in bottom edging, of sufficient size to allow full drainage of any condensate moisture collected in sign.

G) Aluminum In Contact With Ferrous Metals
Aluminum in contact with ferrous metals shall be separated with a heavy coating of bitumastic paint or sheet neoprene.

H) Accessories, Anchorage, Mounting Devices and Spacers
Accessories, anchorage, mounting devices and spacers shall be guaranteed non-staining to adjacent walls and sign finished for a period of five years from final acceptance. Ferrous mountings may be sleeved with non-ferrous metal covers matching adjacent finishes, cemented on with non-hydroscopic glue, or other suitable protective measure may be proposed to comply with this guarantee.

Installation
All signs shall be in place as indicated on the drawings or where directed by the U of M or designee. Signs shall be secured with studs, toggle bolts, expansion bolts, or methods as approved on shop drawings specified hereinafter and of sizes required to assure rigid attachment. Survey of ground conditions related to soil content, density and compaction are the responsibility of the installer prior to submitting bid. Removal and/or replacement of asphalt, concrete, existing footings and poles are the responsibility of the installer unless otherwise specified in drawings.

Shop Drawings, if requested, for Changes or Alternates
Three (3) copies of shop drawings indicating changes or alternates in detail shall be submitted to the U of M or designee. Approval of shop drawings shall be required before any work under this section has begun.

Samples
 Furnish the U of M or designee samples of the finish materials. Colors to match color samples or standard color system code furnished by U of M or designee. All colors shall be as directed by the U of M or designee.

Guarantee and Service
Contractor shall furnish a written guarantee to the effect that all material and work furnished under this section is guaranteed for one (1) year to be free from defects and faulty workmanship, and that any defective material or work shall be promptly repaired or replaced without additional cost to the U of M or designee. Contractor shall, during the first year of operation, fully maintain and service the signs, making regular inspections, and servicing and replacing tubes and electrical equipment as may be necessary to maintain the signs in operation without additional cost to the U of M or designee. Any guarantees for additional time or services as required in other sections of this document or as noted on specifications are to be in addition to this section.

Protection
All exposed surfaces shall be protected until final acceptance of the work in a manner sufficient to prevent damage or discoloration. Any work damaged or discolored in any way before final acceptance of the work shall be replaced without additional cost to the U of M or designee.

Clean-Up
During the process of the work, the premises shall be kept reasonably free of all debris and waste materials resulting from the work under this section. Upon completion and before final acceptance of work, all debris, rubbish, leftover materials, tools and equipment shall be removed from the site.

Final Cleaning
Final cleaning of all surfaces shall be carefully done strictly in accordance with the manufacturer’s instructions.
The method of graphic application should be determined by the particular sign type, its location, and the potential for adjusting the text on the sign following installation. A number of graphic application techniques are available for use, including the following methods:

- **SILK-SCREENING**
  Copy is generated from photo set originals. Use of hand cut screens is not acceptable, with the exception of large-scale custom letterforms. Screen ink may be either surface or sub-surface applied. Sub-surface screening provides a vandal-proof application, but is not changeable and should be considered only for permanent application. Surface-screened copy will allow for removal and reapplication, but is not resistant to abuse. Screened copy represents an economy when multiple occurrences of the same sign are required.

- **PRESSURE SENSITIVE VINYL GRAPHICS**
  Copy is computer generated and cut and provides an excellent means for graphic representation. Accuracy in letterform, the ability to modify height, proportion and spacing, color selection and ease of application account for the popularity of this graphic method.
  Surface applied, the lettering is readily changeable; this flexibility also renders the sign prone to abuse and vandalism. It is necessary to assess the vulnerability of locations when specifying surface applied lettering. Vinyl lettering may also be utilized in a sub-surface application but in doing so, it is non-changeable.

- **ENGRAVED LETTERING**
  Engraved graphics are suitable for small texts and for those applications where vandalism is a concern. Like sub-surface applications, engraved graphics must be considered permanent.
  Note: Engraved lettering does not conform to ADA guidelines for tactile graphics.

- **REVERSE ENGRAVING (ADA)**
  In this process, manufacturers apply adhesive-backed plastic to a substrate, engrave around the letters then remove the background. This process has the advantage of using acrylic as a substrate, allowing a more cohesive sign system when combined with existing acrylic signs.

- **ETCHED TACTILE/BRAILLE (ADA)**
  Etching, sandblasting or otherwise removing the background is another way to produce tactile signs. In this process, camera-ready art is reproduced on a photosensitive surface by exposure to light. The background is then washed away with acids, water or alcohol. Because the original is made photographically, this system has the advantage of being able to match silk-screened letterforms and logos very accurately.

- **RASTER & EMBOSSED BRAILLE**
  To produce above surface Braille two methods are commonly used. One uses small rasters (spheres) placed in precisely drilled holes. The other embosses Braille in formable materials such as thin polycarbonate.
**Design Criteria – Coloration/Materials**

- **Coloration**
  - **Field/Background Color**
    - Interior: Dark Bronze
    - Exterior: Dark Bronze
  - Copy
    - Tactile: White Stock
    - Silkscreen: White Enamel
  - Vinyl White: 3M Scotchcal 7725-10 or equivalent
  - Reflective White: 3M Scotchlite 510-10 or equivalent
  - Reveal Burgundy Vinyl: 3M Scotchcal 7728-58 or equivalent
  - University Wordmark
    - Field: Burgundy to match PMS #209C
    - Wordmark: White Vinyl or silkscreen

- **Materials**
  - Fabrication Materials
    - Aluminum 5052 alloy
    - Acrylic
      - Clear 1/16” - Plexiglas non-glare or equivalent
      - Clear 1/8” - Plexiglas P-95 or equivalent non-glare
      - White Plexiglas 7420 (matte) or equivalent
      - Black Plexiglas 2025 (gloss) or equivalent
  - Installation Materials
    - Foam Tape
    - 1/16” black 3M #4016 or equivalent

- **Options for Design**
  Sign sizes, layouts and formats have been carefully determined to meet existing codes, guidelines and to form a visually cohesive sign system.

  Special requirements may require color-coding of the reveals or an alternate field and copy color. Alternate color schemes are possible only with approval from University of Minnesota Duluth Facilities Management.

- **Design Criteria – Interline Spacing and Margins**
  When one subject continues on two or more lines of a sign the interline spacing should be 35% from baseline to baseline. If the subjects are different 100% spacing should be applied.
**DESIGN CRITERIA – LETTERSTYLE**

ADA requires all upper case on any sign designated as identifying a *permanent* space. See “ADA Guidelines (Continued)” on page six of this document. This includes any permanent suite or room. Non-ADA signs are to use a mix of upper and lower case characters. All upper case may be used for titles and/or where a word or phrase must be emphasized. The initial word of a sentence or title is to be capitalized.

- **LETTERSTYLE – HELVETICA REGULAR**
  Helvetica Regular is the letterstyle designated as the University Standard. The alphabet is shown below:

  ABCDEFGHIJKLMNOPQRSTUVWXYZ
  abcdefghijklmnopqrstuvwxyz
  1234567890.,?!&$%#/_()

- **LETTERSTYLE – HELVETICA MEDIUM**
  Helvetica Medium letterstyle may be introduced on a limited basis for emphasizing portions of text. The alphabet is shown below:

  ABCDEFGHIJKLMNOPQRSTUVWXYZ
  abcdefghijklmnopqrstuvwxyz
  1234567890.,?!&$%#/_()

Note:

When producing reverse engraved signs utilizing Helvetica family typefaces, it may be necessary to individually digitize the letterforms to ensure correct proportioning and stroke width.
Letter size is dependent upon a number of factors:

- Viewing distance
- Letter contrast with background color.
- Lighting conditions in the area the sign is to be located.
- The following matrices shall be utilized in determining sign and letter size.

**Accessibility Standards: Viewing Distances**

Listed are the MAXIMUM viewing distances for the various letter heights.

<table>
<thead>
<tr>
<th>Height of Letters (Inches)</th>
<th>Viewing Distance (Feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>400 - 525</td>
</tr>
<tr>
<td>10</td>
<td>350 - 450</td>
</tr>
<tr>
<td>8</td>
<td>275 - 350</td>
</tr>
<tr>
<td>6</td>
<td>240 - 300</td>
</tr>
<tr>
<td>5</td>
<td>200 - 250</td>
</tr>
<tr>
<td>4-1/2</td>
<td>150 - 200</td>
</tr>
<tr>
<td>4</td>
<td>120 - 150</td>
</tr>
<tr>
<td>3-1/2</td>
<td>105 - 120</td>
</tr>
<tr>
<td>3</td>
<td>90 - 100</td>
</tr>
<tr>
<td>2-1/2</td>
<td>75 - 90</td>
</tr>
<tr>
<td>2</td>
<td>60 - 75</td>
</tr>
<tr>
<td>1-1/2</td>
<td>40 - 60</td>
</tr>
<tr>
<td>1</td>
<td>30 - 40</td>
</tr>
<tr>
<td>3/4</td>
<td>20 - 30</td>
</tr>
<tr>
<td>1/2</td>
<td>10 - 20</td>
</tr>
<tr>
<td>1/4</td>
<td>less than 10</td>
</tr>
</tbody>
</table>

**Sizing Matrix**

Listed are the number of characters and spaces PER LINE for various letter heights and sign lengths.

<table>
<thead>
<tr>
<th>Height of Letters (Inches)</th>
<th>Sign Length (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8</td>
</tr>
<tr>
<td>1/2</td>
<td>15</td>
</tr>
<tr>
<td>5/8</td>
<td>13</td>
</tr>
<tr>
<td>3/4</td>
<td>11</td>
</tr>
<tr>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>1-1/4</td>
<td>14</td>
</tr>
<tr>
<td>1-1/2</td>
<td>11</td>
</tr>
<tr>
<td>1-3/4</td>
<td>13</td>
</tr>
<tr>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>2-1/2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
**Design Criteria – Arrows & Symbols**

- **Arrows**
The standard arrow is a square tip arrow and is reversed out of a circular field as shown. The arrow is to be justified left and precede the copy to which it applies.

- **Restroom Symbols**
The men and women symbols are standard DOT symbols and should be accompanied by the international symbol of access if appropriate. Symbol must be in a field of at least 6" and separate from accompanying text.

- **ADA Symbols**
The International Symbol of Access should appear at all building entrances, restrooms, & areas of refuge that are accessible to the physically disabled. There is no size restriction but it is recommended that the symbol be large enough to be identified from a decision point. The International Symbol of Access should not be used with the "No" Symbol (Circle with slash through it) when indicating non-accessible areas and should always face to the right.

- **Miscellaneous Symbols**
The Volume Control Telephone, TDD and Assistive Listening System identify locations where telephones have been adapted for the use of persons with hearing impairments. Other miscellaneous symbols are visual clues to assist in wayfinding and identification.
The appropriate method is dependent upon:

- Sign Type
- Wall Surface
- Aesthetic Considerations
- Need for Permanence

**Silastic Adhesive**
Silicone adhesive provides a permanent bond between wall surfaces. Removal will damage wall surfaces and should only be employed in instances where security is a concern or the texture of the wall surface will not permit foam tape mounting.

**Foam Tape Mounting with Mechanical Mount**
This installation method is employed in instances where the mounting surface is not conductive to the use of tape or silastic adhesive. Here, an undersized backplate is mechanically anchored to the wall surface with the sign plaque then foam taped on the backer plate. Silicone adhesive may also be used.

**Velcro Mounting**
Velcro material is applied to small sign plaques for attachment to fabric surfaces such as modular wall panels. Fabric texture will determine the suitability of this mounting method.

**Permanent Installation**
Permanence may be achieved by using mechanical mounting using tamper resistant screws. (See individual sign layouts for details.)
The University identification symbol was developed by the University of Minnesota as part of a University-wide identity program.

Information regarding this copyrighted trademark for the University is controlled by a separate group of guidelines monitored by University Relations. See http://www.d.umn.edu/publications/.

A modified Times-Roman letterstyle is available for use in both one- and two-line formats.

Use should be limited to original art in order to maintain accuracy in its reproduction.

The use of the wordmark in campus signing is reserved for:
- Instances where it is appropriate to provide a broad-based reference to the University of Minnesota Duluth.
- Use in conjunction with other titles, but may not be merged within bodies of text, or modified from its standard form.
- Campus Identification, vehicular identification and in interior signing where the University of Minnesota Duluth is used as a stand-alone title.

Examples of Wordmark:

UMD Wordmark
**Single line delineation**

UMD Wordmark
**Double line delineation**
**Left Justification**

UMD Wordmark
**Double line delineation**
**Center Justification**
A well-managed signing program is an essential component on campus facilities. Whether identifying a building, controlling pedestrian or vehicular traffic, or informing students, staff and visitors, a unified program of signs and graphics is vital to the function of the campus.

As a design resource, the components illustrated in this document are intended to provide the necessary direction for both in-house staff and consultant designers in the planning of signing programs. It should be recognized, however, that these standards cannot provide an immediate solution for every instance that arises. In these cases, the standards become a frame of reference that designers or facility planners may draw upon in the development of specific projects.

Beyond the immediate value as a design resource, the presence of a well-designed signing system fosters a positive image for the identity of the University. The presence and application of these standards will help to insure the continued unified direction in this area of facility planning.

The signing standards are therefore planned to be continually monitored and updated, allowing them to change with new developments in manufacturing techniques, building codes, and design trends. Changes and modifications to these standards are reviewed and recommended by University of Minnesota Duluth’s Facilities Management.
NOTES FOR “A” STYLE SIGNAGE
Notes on signage styles are general recommendations and are subject to change by UMD Facilities Management.

For all “A” style signage: left margin should be a consistent 5/8”

SIGN TYPE A1:
- **General:**
  - To be used for 1-2 person occupancy office areas, undesignated secondary spaces
- **Inserts:**
  - Dimensions should be 3-1/8” x 8-1/2”
  - Computer-produced on white paper with black copy. “Alternate color schemes are possible only with approval from University of Minnesota Facilities Management.”
  - Helvetica Regular (or alternative Sans Serif font) is the designated letter-style
  - Recommended sizes for information to be written on inserts:
    - **Name**– 3/4” text (approximately 72 pt.)
    - **Department**– 1/2” text (approximately 48 pt.)
    - **Title**– 3/8” (approximately 36 pt.)
  - Pictures/graphics are acceptable as long as they are small & do not interfere with text

SIGN TYPE A2:
- **General:**
  - To be used when the information normally placed on an A1 sign does not fit, or if there is an instance of two offices with a single entryway.
  - The vinyl text on the upper portion of the sign is optional, but when used should indicate the department name or other applicable information.
- **Inserts:**
  - Dimensions should be 9-5/8” x 8-1/2”
  - See above recommendations for paper inserts

SIGN TYPE A3:
- **General:**
  - Semi-permanent identification of secondary destinations (vinyl lettering)
  - These signs should not be used to designate custodial or mechanical rooms

SIGN TYPE A4:
- **General:**
  - Permanent identification of secondary destinations
  - These signs should be used to designate custodial or mechanical rooms
  - Text on the upper portion of the sign should be in ALL CAPS
NOTES FOR “B” STYLE SIGNAGE
Notes on signage styles are general recommendations and are subject to change by UMD Facilities Management.

SIGN TYPE B1:

- **General:**
  - To be used for semi-permanent identification of primary destinations. The vinyl text used on the top plate of this sign is easily replaceable making it useful for rooms that are semi-permanent. Examples of primary destinations are classrooms, laboratories, lecture halls, and department offices.

SIGN TYPE B2:

- **General:**
  - This sign is used for permanent identification of primary destinations. See examples above for primary destinations.

NOTES FOR “D” STYLE SIGNAGE
Notes on signage styles are general recommendations and are subject to change by UMD Facilities Management.

D1 SIGN TYPE:

D1 signs should be used for restrooms containing 1-4 stalls.

Single-stall restrooms can be either designated for women, men, or common use. All single-use bathrooms should have a locking mechanism and the sign type should indicate that the door should be locked when in use.
NOTES FOR “G” STYLE SIGNAGE

Notes on signage styles are general recommendations and are subject to change by UMD Facilities Management.

Purpose of “G” Style/Concourse Directional Signage:
Most of UMD’s buildings are connected by means of concourses throughout the campus. Campus directional signage is used to direct people to buildings that are part of the internally connected campus. Overhead “G” style signage designed by Facilities Management should not indicate locations of non-building areas. Non-building areas can be signed using F-style signage.

Text:
♦ Indicate buildings only
♦ Should not use abbreviations unless necessary
♦ Text should be arranged in two or three columns (see next bullet)
♦ Should be arranged to indicate a clear way for individuals to find buildings they are searching for:
  Buildings should be arranged nearest to farthest starting at the top
  Buildings to the left are on the left-hand side of the sign (if 3 columns)
  Buildings to the right are on the right-hand side of the sign (if 3 columns)
  Buildings ahead are in the center column of the sign (if 3 columns)
♦ All signage should indicate buildings no farther than Kirby Student Center; Kirby Student Center is the “way-finding hub” and will direct individuals to anywhere on campus
♦ A star located in the lower right corner of the sign marks the building that you are entering.

Font Size:
♦ The height of copy on overhead signage throughout the UMD campus varies from 1” to 3”. Current ADA standards require 3” text height, so in any new construction, this code must be met. When a sign without the 3” text needs to be updated, updates may be made in the original text height. Also, to create a continuous appearance throughout a building on the concourse system, the font height should remain the same on all signs.

Symbols:
♦ Arrow must be smaller than the 3” diameter circle encompassing it
♦ To indicate a building that cannot be directed by one arrow, two arrows may be used. The arrow on the left will indicate the first direction to be followed (in general, straight ahead), while the second arrow will designate the secondary direction. See example below.
♦ If two arrows are used, align the second arrow with the single arrows in a row (i.e. right justification.)
♦ Signs within a building should not have a star indicating that a person is in the building.

Installation:
♦ Signage should be installed wall-to-wall on door headers (G2) when at all possible.
♦ Radius corners (G1) to be used when installation not wall-to-wall
♦ Best located over door on transom between buildings in the concourse system
Sign Type A1

Use
Temporary identification of secondary destinations

Specifications
Upper face to be fabricated from 1/8" clear non-glare P-95 acrylic, with viewing window backscreened in the configuration shown. Coverage to be sufficient to provide an even and totally opaque finish. Face and back pieces to be bonded together with 1/16" black foam bonding tape, forming insert window, open at both ends.

Lower face to be fabricated from 1/8" clear non-glare P-95 acrylic backpainted to match upper face.

Raised numerals are to be raised a minimum height of 1/32" and white in color. Raised characters must be inseparable from the sign face to insure sign is vandal-resistant. All copy to be white Helvetica Regular font.

Grade II Braille characters are pinned from sign face to a minimum height of 1/32". Braille should state building name and room number.

Reveal to be formed by gap between upper and lower faces. Reveal to be Arlon High-Performance vinyl or approved substitute. Colors are as follows: for red vinyl: Tomato Red #14, for blue vinyl: Blue #05, for maroon vinyl: Burgundy #12, for gold vinyl: Gold Metallic #04.

Backplate is 1/8" gloss black acrylic.

Following assembly, all edges are to be routed smooth, and all corners lightly sanded to remove sharpness.

Mounting method is to be determined by wall surface and is to be mounted 66" from floor to top of sign, and 4" from the latch (handle) side of the door frame.

Revised 09/2002
Sign Type A3

Use
Semi-permanent identification of secondary destinations

Specifications
Upper face to be fabricated from 1/8" clear non-glare P-95 acrylic, backpainted 313 dark bronze. Coverage to be sufficient to provide an even and totally opaque finish.

Lower face to be fabricated from 1/8" clear non-glare acrylic backpainted to match upper face.

Pressure sensitive vinyl text allows for revision as required. All copy to be white Helvetica Regular font.

Raised numerals are to be raised a minimum height of 1/32" and white in color. Raised characters must be inseparable from the sign face to insure sign is vandal-resistant.

Grade II Braille characters are pinned from sign face to a minimum height of 1/32". Braille should state building name and room number.

Reveal to be formed by gap between upper and lower faces. Reveal to be Arlon High-Performance vinyl or approved substitute. Colors are as follows: for red vinyl: Tomato Red #14, for blue vinyl: Blue #05, for maroon vinyl: Burgundy #12, for gold vinyl: Gold Metallic #04.

Backplate is 1/8" gloss black acrylic.

Following assembly, all edges are to be routed smooth, and all corners lightly sanded to remove sharpness.

Mounting method is to be determined by wall surface and is to be mounted 66" from floor to top of sign, and 4" from frame on latch (handle) side of door.

Revised 10/2002
Sign Type A4

Use
Permanent identification of secondary destinations

Specifications
Upper face to be fabricated from 1/8" clear non-glare P-95 acrylic, backpainted 313 dark bronze.
Coverage to be sufficient to provide an even and totally opaque finish.

Lower face to be fabricated from 1/8" clear non-glare P-95 acrylic backpainted to match upper face.

Raised numerals are to be raised a minimum height of 1/32" and white in color. Raised characters must be inseparable from the sign face to insure sign is vandal-resistant. All copy is to be white Helvetica Regular font.

Grade II Braille characters are pinned from sign face to a minimum height of 1/32". Braille on upper plate should read the indicated room name, while the bottom plate should state building name and room number.

Reveal to be formed by gap between upper and lower faces. Reveal to be Arlon High-Performance vinyl or approved substitute. Colors are as follows: for red vinyl: Tomato Red #14, for blue vinyl: Blue #05, for maroon vinyl: Burgundy #12, for gold vinyl: Gold Metallic #04.

Backplate is 1/8" gloss black acrylic.

Following assembly, all edges are to be routed smooth, and all corners lightly sanded to remove sharpness.

Mounting method is to be determined by wall surface and is to be mounted 66" from floor to top of sign, and 4" from frame on latch (handle) side of door.

Revised 10/2002
### Sign Type B1

**Use**
Semi-permanent identification of primary destinations.

**Specification**
Upper face to be fabricated from 1/8" clear non-glare P-95 acrylic, backpainted 313 dark bronze. Coverage to be sufficient to provide an even and totally opaque finish.

Lower face to be fabricated from 1/8" clear non-glare P-95 acrylic backpainted to match upper face.

Pressure sensitive vinyl text allows for revision as required. All copy to be white Helvetica Regular font.

Raised numerals are to be raised a minimum height of 1/32" and white in color. Raised characters must be inseparable from the sign face to insure sign is vandal-resistant.

Grade II Braille characters are pinned from sign face to a minimum height of 1/32". Braille should state building name and room number.

Reveal to be formed by a gap between upper and lower faces. Reveal to be Arlon High-Performance vinyl or approved substitute. Colors are as follows: for red vinyl: Tomato Red #14, for blue vinyl: Blue #05, for maroon vinyl: Burgundy #12, for gold vinyl: Gold Metallic #04.

Backplate is 1/8" gloss black acrylic.

Following assembly, all edges are to be routed smooth, and all corners lightly sanded to remove sharpness.

Mounting method is to be determined by wall surface and is to be mounted 66" from floor to top of sign, and 4" from frame on latch (handle) side of door.

Revised 10/2002

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### Wall Surface
- 1/16" black foam bonding tape

### Surface-applied pressure-sensitive white vinyl graphics

### 1/8" clear non-glare P-95 acrylic backpainted 313 dark bronze

### 1/4" reveal color of level (no color, red, blue, or gold)

### 1/32" raised number-white

### 1/8" clear non-glare P-95 acrylic backpainted 313 dark bronze with pinned Grade II Braille

### 1/8" gloss black acrylic backplate

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### Elevation Detail (NTS)

- **Building Name**
  - 100

- **Room Name**

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### Section Detail (NTS)

- **Wall surface**
  - 1/16" black foam bonding tape

- **Surface-applied pressure-sensitive white vinyl graphics**

- **1/8" clear non-glare P-95 acrylic backpainted 313 dark bronze**

- **1/4" reveal color of level (no color, red, blue, or gold)**

- **1/32" raised number-white**

- **1/8" clear non-glare P-95 acrylic backpainted 313 dark bronze with pinned Grade II Braille**

- **1/8" gloss black acrylic backplate**

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**Sign Type B2**

**Use**
Permanent identification of primary destinations.

**Specification**

Upper face to be fabricated from 1/8" clear non-glare P-95 acrylic, backpainted 313 dark bronze. Coverage to be sufficient to provide an even and totally opaque finish.

Lower face to be fabricated from 1/8" clear non-glare P-95 acrylic backpainted to match upper face.

Raised text and numerals are to be raised a minimum of 1/32". Raised characters must be inseparable from the sign face to insure sign is vandal proof. All lettering is to be white Helvetica Regular font.

Grade II Braille characters are pinned from sign face to a minimum height of 1/32". Braille on upper plate should read the indicated room name, while the bottom plate should state building name and room number.

Reveal to be formed by a gap between upper and lower faces. Reveal to be Arlon High-Performance vinyl or approved substitute. Colors are as follows: for red vinyl: Tomato Red #14, for blue vinyl: Blue #05, for maroon vinyl: Burgundy #12, for gold vinyl: Gold Metallic #04.

Backplate is 1/8" gloss black acrylic.

Following assembly, all edges are to be routed smooth, and all corners lightly sanded to remove sharpness.

Mounting method is to be determined by wall surface and is to be mounted 66" from floor to top of sign, and 4" from frame on latch (handle) side of door.

Note: Dedicating rooms must be reviewed by the executive committee of the campus assembly under the university honors policy

Revised: 10/2002
Use
Secondary restroom identification.
(1-4 stalls)

Specification
Upper face to be fabricated from 1/8" clear non-glare P-95 acrylic, backpainted 313 dark bronze. Coverage to be sufficient to provide an even and totally opaque finish.

Sub-surface applied vinyl DOT symbols, White

Lower face to be fabricated from 1/8" clear non-glare P-95 acrylic backpainted to match upper face.

Raised numerals are to be a minimum height of 1/32". Raised characters must be inseparable from the sign face to insure sign is vandal resistant. All copy to be white Helvetica Regular font.

Grade II Braille characters are pinned from sign face a minimum height of 1/32". Braille should designate whether the restroom is women, men, or restroom; if the sign designates common-use, Braille should also indicate that the restroom should be locked when in use.

Reveal to be formed by a gap between upper and lower faces. Reveal to be Arlon High-Performance vinyl or approved substitute. Colors are as follows: for red vinyl: Tomato Red #14, for blue vinyl: Blue #05, for maroon vinyl: Burgundy #12, for gold vinyl: Gold Metallic #04.

Backplate is 1/8" gloss black acrylic.

Following assembly, all edges are to be routed smooth, and all corners lightly sanded to remove sharpness.

Mounting method is to be determined by wall surface and is to be mounted 66" from floor to top of sign, and 4" from frame on latch (handle) side of door.

Revised 10/2002
Sign Type D2

Use
Primary Restroom Identification.
(more than 4 stalls)

Specification
Upper face to be fabricated from 1/8" clear non-glare acrylic, backpainted 313 dark bronze. Coverage to be sufficient to provide an even and totally opaque finish.

Sub-surfaced silkscreened DOT symbols, White.

Lower face to be fabricated from 1/8" clear non-glare P-95 acrylic backpainted to match upper face.

Reverse engraved numerals are to be raised a minimum height of 1/32" and be white in color. Raised characters must be inseparable from the sign face to insure sign is vandal-resistant. All copy to be white Helvetica Regular font.

Grade II Braille characters are pinned from sign face to a minimum height of 1/32".

Reveal to be formed by a gap between upper and lower faces. Reveal to be Arlon High-Performance vinyl or approved substitute. Colors are as follows: for red vinyl: Tomato Red #14, for blue vinyl: Blue #05, for maroon vinyl: Burgundy #12, for gold vinyl: Gold Metallic #04.

Backplate is 1/8" gloss black acrylic.

Following assembly, all edges are to be routed smooth, and all corners lightly sanded to remove sharpness.

Mounting method is to be determined by wall surface and is to be mounted 66" from floor to top of sign, and 4" from frame on latch (handle) side of door.

Revised 10/2002
**Sign Type E2**

**Use**
Stair or stair level identification in hallway

**Specifications**
Upper face to be fabricated from 1/16" clear non-glares P-95 acrylic, backpainted 313 dark bronze. Coverage to be sufficient to provide an even and totally opaque finish.

Lower face to be fabricated from 1/16" clear non-glares P-95 acrylic backpainted to match upper face.

Raised numerals are to be a minimum height of 1/32” and be white in color. Raised characters must be inseparable from the sign face to insure sign is vandal resistant. All copy to be white Helvetica regular font.

Grade II Braille characters are pinned from sign face to a minimum height of 1/32”. Braille on upper plate should read the floor level and exit level (e.g. 2 Floor Exit 1 Floor), while the bottom plate should state building and stairwell name.

Reveal to be formed by gap between upper and lower faces. Reveal to be Arlon High-Performance vinyl or approved substitute. Colors are as follows: for red vinyl: Tomato Red #14, for blue vinyl: Blue #05, for maroon vinyl: Burgundy #12, for gold vinyl: Gold Metallic #04.

Backplate is 1/8” gloss black acrylic.

Following assembly, all edges are to be routed smooth, and all corners lightly sanded to remove sharpness.

Mounting method is to be determined by wall surface and is to be mounted 66” from floor to top of sign, and 4” from frame on latch (handle) side of door.

Revised 10/2002
Use
Fire code and level identification for inside stairwell

Specifications
Sign face to be fabricated from 1/8" clear non-glare P-95 acrylic, backpainted 313 dark bronze. Coverage to be sufficient to provide an even and totally opaque finish.

Subsurface applied vinyl text for permanence.

Grade II Braille characters are pinned from sign face to a minimum height of 1/32". Braille should state building name abbreviation, floor level, and exit level. (Example: MonH  G Floor  Exit G Floor)

Following assembly, all edges are to be routed smooth, and all corners lightly sanded to remove sharpness.

Mounting method is to be determined by wall surface and is to be mounted 66" from floor to top of sign, and 4" from frame on latch (handle) side of door.

Revised 06/2002
**Sign Type EX1**

**Use**
Free standing building identification sign

**Specification**
Panel to consist of two (2) 2" aluminum table top sign panels (.090 aluminum face with 90-degree returns on all sides), fitted together to form a 2" thick double faced sign panel. Edges to be continuous welded and ground true and clean.

Sides of panels to be drilled and tapped to accept 1/2" mounting bolts, 3 per side, in this module dimension.

Posts to consist of 2" x 4" x 3/16" wall thickness steel tube, with welded top cap. All welds to be ground true and clean. Posts to be drilled to accept 1/2" mounting bolts, aligning with tapped screw holes of sign panels. Heads to be countersunk flush with the surface of the post. Separate dissimilar metals with a physical barrier.

Post, panel and anchor bolts to be finished with US paints polyurethane enamel (or equivalent) with metal surfaces prepared and primed in accordance with the manufacturer’s recommendations.

Graphics to consist of silk-screened or pressure sensitive vinyl lettering, selection depending upon particular application. Font for University wordmark to be white Times New Roman. Font for building name and address text to be white Helvetica Regular.

Panel to be attached to wall surface utilizing two (2) 2" x 2" x 1/8" galvanized steel "L" angles, as noted on the accompanying detail drawing.

Posts may be installed utilizing direct immersion method into circular concrete footing, 48" deep. Other methods of installation include mounting flange and base plate, bolted directly to masonry surface, and embedded mounting sleeves, permitting removal of the post and panel arrangement at a later time.

Revised: 10/2002
Sign Type EX2

Use
Surface Mounted Building Identification Sign

Specification
Panel to consist of .090 aluminum face with 90-degree returns on all sides. Corners joints to be welded and ground true and clean.

Panel to be painted with US paints polyurethane enamel (or equivalent) with metal surfaces prepared and primed in accordance with the manufacture’s recommendations.

Graphics to consist of silk-screened or pressure sensitive vinyl lettering, selection depending upon particular application. Font for University wordmark to be white Times New Roman. Font for building name and address text to be white Helvetica Regular.

Panel to be attached to wall surface utilizing two (2) 2” x 2” x 1/8” galvanized steel “L” angles, as noted on the accompanying detail drawing.

Channels to be drilled to accommodate 3 mounting holes at top and bottom rails, for attachment to wall surface. Separate dissimilar metals with a physical barrier.

Top and bottom rails to be drilled to accept non-corrosive mounting screws. Return of sign panel to be drilled to correspond with tapped set-screw holes of the mounting channel.

The sign panel may be specified in alternate sizing for the graphic applications. Alternate applications shall be approved by Facilities Management.

Revised: 10/2002
Campus Directory Specifications: Page 1 of 2

Header Panel & Directory Case
Created: April 4, 2002

Campus Directory Elevation Detail:
As Mounted On Wall

Directory Listings
Map

Directory Cabinet: Cut-Away Detail A-A

Hinge
Glass or Acrylic Door
Acrylic inserts
(Directory listings)

Aluminum Header Panel Detail

CAMPUS DIRECTORY

Note: Background color (Red, Blue, Gold, Bronze) per concourse level. White lettering.

* NOTE: Manufacturer to be Stanco Signage, Inc. or preapproved equal.
Frame Inserted in Map Cabinet: Section Detail

1. Four (4) 33-1/8" J-Channels to form a square frame
2. Plexiglass to be routered to fit securely in J-channel frame
3. Back of map frame should consist of a single opaque plastic backer which three of the four J-channels are taped to.
4. The fourth J-channel should be removable so a map can be inserted between the back and the plexiglass.
5. On the back side of the opaque plastic, velcro should be attached so the map is secured within the cabinet.