SECTION 10405 - INTERIOR AND EXTERIOR SIGNS

PART 1 - GENERAL

1.01 SECTION INCLUDES
A. Interior and exterior signage as indicated on the Drawings.

1.02 COORDINATION
A. Signage contact: ___________. Call for delivery coordination and installation requirements. Verify schedule before scheduling delivery.

B. Schedule:
1. Pricing submitted for Owner review: ___________.
2. Purchase order created: ___________.
3. Shop Drawings complete for Owner/Architect review: ___________.
4. Installation schedule ___________.
5. Phased delivery and installation to be coordinated with Owner, Architect, and other contractors.
6. Completion: ___________.

1.03 REFERENCES
A. Title III of the "Americans with Disabilities Act of 1990," (ADA), Department of Justice.

1.04 SUBMITTALS
A. Manufacturer's Product Data, including material description and fabrication methods.
B. Written schedule. The work schedule will be established upon approval by the Owner and the Architect.
C. Manufacturer's Shop Drawings for approval before beginning fabrication. Include list of signs and drawings of each.
D. Sample signs of each type for approval.
E. Installer’s qualifications for approval. Include installing company’s number of years experience, project and client references, and a list of specific installers with number of years experience for each installer.
F. Manufacturer’s and installer’s warranty, providing correction of faulty installation and color-fastness of materials at no cost to the Owner, for 2 years after completion.

1.05 QUALITY ASSURANCE
A. Installer: Company with 5 years experience. Bidding to allow for installation to be outsourced to a qualified installer if required by the Owner.
B. Comply with Americans with Disabilities Act (ADA), Americans With Disabilities Act Accessibilities Guidelines (ADAAG), Minnesota State Accessibility Code and other applicable regulations.
C. Replace signs found to be in error at no cost to the Owner.
D. Employ a proficient, independent Braille reader to proofread all copy. Proofreader may certify Braille is correct by review of the sign fabricator's text proofs prior to fabrication, or by review of signs after fabrication. Proofreading shall confirm that Braille is in accurate Grade 2 Braille, complies with guidelines, and accurately reflects the intent of the communication for the Braille reader.

1.06 DELIVERY, STORAGE, HANDLING
A. Label each piece on the outside of the package, with item code and location for installation. Refer to Exhibit B.
B. Deliver signs in protective wrapping to prevent damage during delivery and storage.
C. Deliver to loading dock at ___________.
D. Prior to delivery, store signs in dry area, protected from the elements, up to one month beyond scheduled completion date if the building construction is delayed, at no cost to the Owner.

PART 2 - PRODUCTS

2.01 PLASTIC SIGNS
A. Type:
1. Frame: 1/16 inch thick aluminum, mitered corners, eased edges.
2. Insert: Removable panel, 2-ply white/clear matte plastic. Smooth, without ridges or other intrusions that would interfere with ability to read Braille.
B. Design:
1. Character and number height: 5/8 inch minimum, 2 inches maximum, except when otherwise required by ADA Section 4.30.3.
2. Character and number depth: Raised 1/32 inch.
3. Copy style: 80% Condensed Times New Roman Bold, or as indicated in Drawings.

4. Braille: All text and numbers shall also appear in Braille.
   a. Location: Below corresponding tactile text. For multi-lined text, place Braille below entire text
   b. Raised elements, borders: Separate 3/8 inch minimum from Braille dot cell groups. Apply clearance dimension to the depression caused by a routed or similar system, to the distance of the border to tactile characters in an acrylic dot system.
   c. Alignment: A clear cell may be inserted at the beginning and end of a row to set the left and right border spacing in lieu of 3/8 inch.

C. Engraving process: Tactile signage shall be the same as cast profile:
   1. Apply profile material to substrate just prior to engraving by removing the liner from the adhesive-backed profile material and placing on top of the substrate material.
   2. Engrave entirely through the profile material to produce raised letters, numbers, and symbols. Strip excess profile material immediately, leaving the raised letter, number, and symbol characters bonded to the substrate.
   3. Photo-electro plated or machined system may be used, if results comply with applicable ADA standards.

2.02 BRAILLE

A. Type: Grade 2, domed, 0.019 inch to 0.250 inch tall, to allow smooth tactile sweep of the fingers.

B. Dot color: White.

C. Message: All lowercase letters.
   1. Capital letters: Place a "dot 6" immediately before affected letters.
   2. Abbreviations: Place a double caps "dot 6 dot 6" only before abbreviations.

D. Dot, cell spacing: Comply with one of the following standards. Dimensions in inches.

<table>
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<tr>
<th></th>
<th>ANSI</th>
<th>ADA</th>
<th>CA24</th>
</tr>
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<tr>
<td>Dot to cot</td>
<td>0.092</td>
<td>0.900</td>
<td>0.100</td>
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<tr>
<td>Cell to cell</td>
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</tr>
<tr>
<td>Row to row</td>
<td>0.400</td>
<td>0.395</td>
<td>---</td>
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</table>

E. Fabrication: Use drill and press fit method for placing Braille dots on architectural signs; computer engineered, using carbide engraving bit, press-fit tool with pump, and acrylic dots. Photo-electro plated or machined system may also be used if it meets ADA standards.

F. Combination numeric/alpha format: "A123" is written: Capital sign, letter, space, number sign, number.

PART 3 - EXECUTION

3.01 EXAMINATION:

A. Examine substrates and conditions under which the installation is to be performed and notify the Architect in writing of conditions detrimental to the proper and timely completion of the Work. Do not begin installation until unsatisfactory conditions have been corrected.

B. Verify that mounting locations for each sign comply with applicable regulations.

3.02 INSTALLATION

A. Install temporary paper interior room signs with removable tape to identify the location of the signs for verification by the Owner. Allow 2 weeks for Owner response, and for the Architect to issue changes.

B. Permanently mount interior room signs with 3M VHB double-coated acrylic, adhesive-backed foam tape in compliance with ADA Section 4.30.6.

C. Where sign is to be mounted on a window, provide a plain, brushed aluminum backer plate on the back side of the glass. The backer plate shall be the same size as the sign, aligned with the sign. The finish of the back plate shall match brushed aluminum sign finish.

3.03 SCHEDULE

A. Provide number of signs as indicated in Exhibit A.

B. Text of signs is indicated in Exhibit B.

END OF SECTION