SECTION 10.1400 - SIGNAGE

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:

1. Panel signs.
2. Dimensional characters made from acrylic sheet.
3. Dimensional characters made from film.

1.2 DEFINITIONS


1.3 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Shop Drawings: Show fabrication and installation details for signs.

1. Show sign mounting heights, locations of supplementary supports to be provided manufacturer, and by others, and accessories.
2. Provide message list, typetyles, graphic elements, including tactile characters and Braille, and layout for each sign.
3. Drawings indicate requirements for shop drawings indicating fabrication methods of specific signs. Fabrication and materials of these signs are subject to Architect approval.

C. Samples for Initial Selection: Manufacturer's color charts consisting of actual units or sections of units showing the full range of colors available for the following:

1. Applied film
2. Acrylic Sheet, including the following:
   a. Precision-cut characters and graphic symbols. Include representative samples of available typetyles and graphic symbols, in material specified.

D. Samples for Verification: For each of the following products and for the full range of color, texture, and sign material indicated, of sizes indicated:

1. Dimensional Characters: Full-size Samples of each type of dimensional character (letter, number, and graphic element) to be used on Project.
3. Acrylic Sheet: 8 by 10 inches (200 by 250 mm) for each color required.
4. Accessories: Manufacturer's full-size unit.

E. Sign Schedule: Use same designations indicated on Drawings.

F. Qualification Data: For Installer and fabricator.

G. Maintenance Data: For signs to include in maintenance manuals.

H. Warranty: Special warranty specified in this Section.

1.4 QUALITY ASSURANCE

A. Installer Qualifications: An employer of workers trained and approved by manufacturer.

B. Fabricator Qualifications: Shop that employs skilled workers who custom-fabricate products similar to those required for this Project and whose products have a record of successful in-service performance.

C. Source Limitations for Signs: Obtain each sign type indicated from a single source from a single manufacturer.

D. Regulatory Requirements: Comply with applicable provisions in ADA-ABA Accessibility Guidelines and ICC ANSI A117.1.

1.5 PROJECT CONDITIONS

A. Field Conditions: Coordinate with Owner for dates and times of installation. Proceed only after Owner approval of dates and times of installation.

B. Field Measurements: Verify recess openings by field measurements before fabrication and indicate measurements on Shop Drawings.

1.6 COORDINATION

A. Coordinate placement of anchorage devices with templates for installing signs.

1.7 WARRANTY

A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of signs that fail in materials or workmanship within specified warranty period.

1. Failures include, but are not limited to, the following:

a. Deterioration of graphic images and colors.

b. Deterioration of embedded graphic image colors and sign lamination.

2. Warranty Period: Five years from date of Substantial Completion.
PART 2 - PRODUCTS

2.1 MATERIALS

A. Applied Film: Precision-cut characters from film of nominal thickness of 1/32 inch thick minimum, with pressure-sensitive adhesive backing, suitable for exterior applications.

B. Acrylic Sheet: ASTM D 4802, Category A-1 (cell-cast sheet), Type UVA (UV absorbing).

2.2 PANEL SIGNS

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not necessarily limited to, the following:

2. Clarke Systems, Inc.
3. Custom Finishers, Inc.
5. Metal Arts; Div. of L&H Mfg. Co.

B. Interior Panel Signs: Provide smooth sign panel surfaces constructed to remain flat under installed conditions within a tolerance of plus or minus 1/16 inch (1.5 mm) measured diagonally from corner to corner, complying with the following requirements:

1. Acrylic Sheet: .125 inch thick.
2. Corner Condition: Square.
   a. Glass-mounted, with two-face clear tape, applied film, color to match sign, same size as sign, that can be trimmed to exact size as sign.

4. Color: Tape as indicated on Drawings.
5. Tactile Characters: Characters and Grade 2 Braille raised 1/32 inch (0.8 mm) above surface with contrasting colors.

C. Tactile and Braille Sign: Manufacturer's standard process for producing text and symbols complying with ADA-ABA Accessibility Guidelines and with ICC/ANSI A117.1. Text shall be accompanied by Grade 2 Braille. Produce precisely formed characters with square-cut edges free from burrs and cut marks; Braille dots with domed or rounded shape.

1. Panel Material: As indicated on Drawings.
2. Raised-Copy Thickness: Not less than 1/32 inch (0.8 mm).

2.3 DIMENSIONAL CHARACTERS MADE OF ACRYLIC

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not necessarily limited to, the following:
2. Clarke Systems, Inc.
3. Custom Finishers, Inc.
5. Metal Arts; Div. of L&H Mfg. Co.

B. Cutout Characters: Provide characters with square-cut, smooth edges. Comply with the following requirements:
   1. Acrylic: 0.50 inch (12.7 mm) thick.

C. Dimensional Character Sign Schedule:
   1. Sign Type:
      a. Sign Size: As indicated.
      b. Character Size: As indicated.
      c. Text/Message: As indicated.
      d. Location: As indicated.
      e. Room: As indicated.

2.4 DIMENSIONAL CHARACTERS MADE OF FILM

A. Basis-of-Design Manufacturer: Subject to compliance with requirements, provide the following:
   1. Avery Graphics from Avery Dennison, Inc.
   2. Architects choice from complete line of Avery film-type products.

B. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be considered to be incorporated into the Work include, but are not limited to, the following:
   2. Clarke Systems, Inc.
   3. Custom Finishers, Inc.
   5. Metal Arts; Div. of L&H Mfg. Co.

C. Cutout Characters: Provide precision-cut characters with square-cut, smooth edges. Comply with the following requirements:
   1. Applied Film: Precision-cut characters from film of nominal thickness of 1/32 (0.75 mm) thick with pressure-sensitive adhesive backing. Apply copy to glass, doors, or wall surfaces, where indicated.
      a. Color: As selected by Architect from manufacturer's full range.

D. Dimensional Character Sign Schedule:

1. Sign Type:
   a. Sign Size: As indicated.
   b. Character Size: As indicated.
   c. Text/Message: As indicated.
   d. Location: As indicated.

2.5 ACCESSORIES

A. Fasteners and Anchors For Wall Mounted Signs: Provide stand-offs, fastened to wall, with manufacturers recommended fasteners, as required for secure anchorage of stand-offs and signage, noncorrosive and compatible with each material joined, and complying with the following:

1. Use concealed fasteners and anchors unless indicated to be exposed.
2. Provide stainless steel, aluminum, or nylon stand-offs, screw attached to wall studs or, with expansion bolt device or toggle-bolt device.
   a. Provide stainless steel or aluminum anchors and inserts for installations of standoffs, and elsewhere as required. 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.

3. Provide manufacturers recommended fastening method for attaching signage to stand-offs.

2.6 FABRICATION

A. See Drawings for specific notes on fabricating specific signs.

B. General: Provide manufacturer's standard signs of configurations indicated.

1. Where joints are unavoidable, provide joints with a tight hairline fit.
2. Preassemble signs in the shop to greatest extent possible. Disassemble signs only as necessary for shipping and handling limitations. Clearly mark units for reassembly and installation, in location not exposed to view after final assembly.
3. Conceal fasteners if possible; otherwise, locate fasteners where they will be inconspicuous.

2.7 FINISHES, GENERAL

A. Protect finishes and exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

B. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.
3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of work.

B. Verify that items are sized and located to accommodate signs.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. Locate signs and accessories where indicated, using mounting methods of types described and complying with manufacturer's written instructions.
   
   1. Install signs level, plumb, and at heights indicated, with sign surfaces free of distortion and other defects in appearance.
   
   2. Interior Wall Signs: Install signs on walls according to ICC/ANSI A117.1.

B. Wall-Mounted Signs: Comply with sign manufacturer's written instructions except where more stringent requirements apply.
   
   1. Mechanical Fasteners: Use nonremovable mechanical fasteners placed through predrilled holes to attach standoffs. Attach standoffs with fasteners and anchors suitable for secure attachment to substrate as recommended in writing by sign manufacturer.
   
   2. Panel Signs Mounted on Glass: Provide 2 sided clear tape to adhere sign to glass. Apply film to hide tape. Ensure no air bubbles can be seen thru translucent sign. Trim film to match sign.

C. Dimensional Characters Made of Acrylic: Mount characters using standard fastening methods to comply with manufacturer's written instructions for character form, type of mounting, wall construction, and condition of exposure indicated. Provide heavy paper template to establish character spacing and to locate holes for fasteners.
   
   1. Offset Mounting: Mount characters on standoffs where indicated.

D. Dimensional Characters Made of Film:
   
   1. Signs Mounted on Glass, Wood Doors, Gypsum Board, Aluminum, Stainless Steel, and Other Surfaces: Mount letters with adhesive backing as standard with manufacturer for these substrates.
   
   2. Ensure signs mounted on glass is free of gaps and air bubbles, so view of sign from opposite side of glass is flat and clear.

3.3 CLEANING AND PROTECTION
A. After installation, clean soiled sign surfaces according to manufacturer's written instructions. Protect signs from damage until acceptance by Owner.

END OF SECTION 10.1400