

SECTION 101423 PANEL SIGNAGE

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

- A. Work of this Section, as shown or specified, shall be in accordance with the requirements of the Contract Documents.

1.2 SECTION INCLUDES

- A. The Work of this Section includes all labor, materials, equipment, and services necessary to complete the panel signage as shown on the drawings and/or specified herein, including the following:
 - 1. Nonilluminated single-panel-type post and panel signs.

1.3 QUALITY ASSURANCE

- A. Installer Qualifications: Engage an experienced installer who is an authorized representative of the sign manufacturer and who has completed installation of post and panel signs similar in material, design, and extent to that indicated for this Project and with a record of successful in-service performance.
 - 1. The Installer shall be capable of providing replacement message bars within 10 working days of receipt of an order.
- B. Source Limitations: Obtain post and panel signs through one source from a single manufacturer.

1.4 SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: Submit shop drawings for fabrication and installation details and attachments to other work. Show sign mounting heights, locations of supplementary supports to be provided by other installers, and accessories. Show message list, typestyles, graphic elements, and layout for each sign.
- C. Samples: Submit samples for each type of sign assembly showing all components and with the required finish(es), in manufacturer's standard size unless otherwise indicated and as follows:
 - 1. Panel Signs and Exposed Accessories: Full-size sample of panels signs and of each accessory type.
 - 2. Full-size Samples, if approved, will be returned to Contractor for use in the Project.
- D. Product Schedule: For panels signs. Use same designations indicated on Drawings or specified.
- E. Maintenance Data: For signs to include in maintenance manuals.

1.5 WARRANTY

- A. Manufacturer agrees to repair or replace components of signs that fail in materials or workmanship within specified warranty period. Failures include, but are not limited to, the following:
 - 1. Deterioration of finishes beyond normal weathering.
 - 2. Deterioration of embedded graphic image.
 - 3. Separation or delamination of sheet materials and components.
- B. Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Aluminum Sheet or Plate: Alloy and temper recommended by the aluminum producer and finisher for the type of use and finish indicated, and with at least the strength and durability properties specified in ASTM B 209 for 5005-H15 alloy.
- B. Aluminum Extrusions: Alloy and temper recommended by the aluminum producer and finisher for the type of use and finish indicated, and with at least the strength and durability properties specified in ASTM B 221 for 6063-T5 alloy.
- C. Vinyl Film: Opaque, nonreflective vinyl film, 0.0035-inch minimum thickness, with pressure-sensitive adhesive backing, suitable for exterior applications.
- D. Concrete for Post Holes: Mix portland cement complying with ASTM C 150, aggregates complying with ASTM C 33, and clean water to obtain concrete with a minimum 28-day compressive strength of 2500 psi. Use at least 4 sacks of cement/cu. yd., 1-inch maximum-size aggregate, maximum 3-inch slump, and 2 to 4 percent entrained air.

2.2 COMPONENTS

- A. Aluminum Posts: Manufacturer's standard 0.125-inch-thick, structural aluminum tubing extruded from 6063-T5 alloy, with vertical slots to engage sign panels. Provide stop blocks in slots to hold panels in position. Include post caps, fillers, spacers, junction boxes, access panels, and related accessories required for a complete installation. Comply with the following requirements for post shape, finish, and mounting method:
 - 1. Post Shape: 2 by 2 inches square.
 - 2. Post Finish: Baked enamel.
 - 3. Sleeve Mounting Method: Provide sign posts of length required for installation over internal reinforcing members embedded in concrete foundations. Provide manufacturer's standard internal post reinforcing members for direct burial in concrete foundations.
- B. Sign Panels: Provide smooth, even, level sign panel surfaces constructed to remain flat under installed conditions within a tolerance of plus or minus 1/16 inch measured diagonally from corner to corner.
 - 1. Unframed Single-Sheet Panels: Provide unframed single-sheet sign panels with edges mechanically and smoothly finished to conform to the following:

- a. Panel Material: 0.125-inch-thick aluminum plate.
 - Post Finish: Class I, color anodic finish.
 - Panel Finish: Manufacturer's standard semigloss finish with UV inhibitors.
 - b. Edge Condition: Rounded.
- C. Graphic Content and Style: Provide sign copy to comply with requirements indicated for sizes, styles, spacing, content, positions, materials, finishes, and colors of letters, numbers, symbols, and other graphic devices.
 - 1. Surface-Applied, Die-Cut Vinyl Copy: Provide die-cut characters from nonreflective vinyl film with pressure-sensitive adhesive backing. Apply copy to exposed face of sign panel.
 - a. Material: 1/4-inch-thick aluminum plate.

2.3 FABRICATION

- A. General: Provide manufacturer's standard double-post, single-panel-type post and panel signs. The completed sign assembly shall consist of a message panel supported between 2 posts. Comply with requirements indicated for materials, thicknesses, finishes, colors, designs, shapes, sizes, and details of construction.
- B. Posts: Fabricate posts to lengths required for mounting method indicated.
 - 1. Direct Burial: For permanent sign installation, provide posts 36 inches longer than height of sign to permit direct embedment in concrete foundations.
- C. Panels: Form panels to required size and shape. Comply with requirements indicated for design, dimensions, finish, color, and details of construction.

2.4 FINISHES

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations relative to applying and designating finishes.
- B. Baked-Enamel Finish: AA-C12C42R1x (Chemical Finish: cleaned with inhibited chemicals; Chemical Finish: acid-chromate-fluoride-phosphate conversion coating; Organic Coating: as specified below). Apply baked enamel complying with paint manufacturer's specifications for cleaning, conversion coating, and painting.
 - 1. Organic Coating: Thermosetting, modified-acrylic enamel primer/topcoat system complying with AAMA 603.8, except with a minimum dry film thickness of 1.5 mils, medium gloss.
 - 2. Color: As selected by Architect from manufacturer's full range of colors.
- C. Colors and Textures: For exposed sign material that requires selection of materials with integral or applied colors, textures, or other characteristics related to appearance, provide color matches as selected by Architect from manufacturer's standards.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Examine the areas and conditions where signage is to be installed and correct any conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions are corrected to permit proper installation of the work.

3.2 INSTALLATION

- A. General: Locate sign units and accessories where indicated, using mounting methods of type described and complying with manufacturer's written instructions.
- B. Setting Posts: Center and align posts in holes 3 inches above bottom of excavation.
- C. Install signs level, plumb, and at height indicated, with surfaces free from distortion or other defects in appearance.

3.3 CLEANING AND PROTECTION

- A. After installation, clean soiled sign surfaces according to manufacturers written instructions. Protect signs from damage until acceptance by the Owner.

END OF SECTION 101423