

## SECTION 10 14 00

### SIGNAGE March 23, 2018

#### **PART 1: GENERAL**

##### 1.1 DESCRIPTION

- A. Review of Construction Drawings: Bidders shall, as a part of their bid, call specific attention to any construction details, materials, methods of fabrication or other similar items which they consider to be impractical or not in keeping with good industry practice. Requests for change orders for substitutions to address such items after award of contract shall not be accepted.
- B. Quantities/Unit Process: the bid quantity for each Sign Type shall be based on the Sign Schedule. The Contract shall establish unit costs based on these quantities, and the bid shall consist of extensions of these unit costs. The contract shall be adjusted as necessary, using these unit costs, for additions or deletions within ten percent of the base bid quantity for each Sign Type.
- C. Scope of Work by Sign Type:
  - 1. Interior Sign Types IN-01.01.02, IN-01.04, IN-01.31.1, IN-105, IN-110, IN-111, IN-120.1, IN-18.01, IN-300, IN-300.1, IN-300.2, IN-301, IN-301.2, IN-302, IN-310, IN-315, IN-320.1, IN-320.2, IN-320.3, IN-321, IN-322, IN-323, IN-325, IN-351
- D. Allowance for Submittals: Allow for thorough and complete preparation of all submittal items described at Section 1.4, for delivery and/or shipping of same, and for resubmittal(s) as required until approval has been obtained for all items.
- E. Provide an online ordering system for the client to be able to easily order additional signs or components of signs when needed. Provide timeline for product delivery (installations excluded) of reorders.

##### 1.2 STRUCTURAL DESIGN AND ENGINEERING

- A. Details in the Drawings indicate a general design approach for sign structures but do not necessarily include the specific fabrication details required for the complete structural integrity of the signs, nor do they necessarily consider preferred shop practices of individual signage contractors. Such specific fabrication details shall be provided by the Contractor, who shall ensure that all signs withstand any and all static, dynamic and/or erection loads that act upon them, including all such loads associated with handling, erecting, and servicing.
  - B. Signage Contractor shall furnish a complete structural design for each and every sign type, incorporating all reasonable safety factors necessary to protect the Owner and Signage Contractor against public liability.
    - 1. All such structural designs shall meet applicable local, state, and national codes, as well as testing laboratory listings, where required.
  - C. Signage Contractor shall be responsible for the engineering and internal construction of all signs, and shall submit shop drawings and details for review by the VA. If required, shop drawings for Sign Types shall be designed and stamped by a licensed Engineer currently registered in the State of California. Said stamped shop drawings shall specify all structural components and methods required to withstand the design wind load and design seismic load at the location of the sign(s).
    - 1. All structural design shall meet applicable local, state, and national codes, as well as testing laboratory listings, where required.
-

2. Seismic Forces: Engineered shop drawings shall specify all necessary measures to withstand seismic forces at the project location.

### 1.3 QUALITY ASSURANCE

- A. Manufacturer's Qualifications: Provide signage that is the product of one manufacturer, who has provided signage as specified for a minimum of three (3) years. Submit manufacturer's qualifications.
- B. Installer's Qualifications: Minimum three (3) years' experience in the installation of signage of the type as specified in this Section. Submit installer's qualifications.
- C. Do not scale drawings for dimensions. Use only the written dimensions indicated on the Drawings, unless such be found in error. Signage Contractor shall verify and be responsible for all dimensions and conditions shown by the Drawings, and shall visit the site to inspect and verify field conditions prior to fabrication and installation. The VA shall be notified, in writing, of all discrepancies on Drawings, in field dimensions or conditions, and of changes required in construction details.
- D. Provide each type of sign as a complete unit produced by a single manufacturer, including all required mounting accessories, fittings and fastenings.
- E. All details shown in the Drawings shall be followed for accurate appearance. No substitutions. Minor changes in interior construction will be accepted in order to conform to Signage Contractor's shop practices or engineering requirements when, in the VA's sole judgment, such changes do not detract materially from design concept or intent. Design accents and details such as extrusions and sign thickness shall be implemented exactly as shown in the drawings. Signage Contractor shall circle all such changes on the shop drawings for approval.
- F. Completed work shall be structurally sound, and free from scratches, distortions, chips, breaks, blisters, holes, splits or other disfigurements considered as imperfections for the specific material.

### 1.4 SUBMITTALS

- A. Presubmittal Conference: Coordinate with the VA prior to preparation of submittals to confirm submittal requirements and schedule.
  - B. Design Document (for verification and approval)
    1. Typography, Pictograms and Finishes Legend. Submit complete typeface font(s), including upper and lower case letters, numbers and punctuation, for all typeface(s) specified. Also submit samples of pictogram, letter and word spacing for each cap height specified.
    2. Overall Digital Color Rendering of Sign Type Typical
    3. CSI Specification Information.
    4. Sign Types:
      - Detail Sheet, for all sign types, to include: elevation, graphic layout, section, part list, mounting method, locations of all exposed fasteners, mounting heights, colors and finishes.
      - Verify compliance with ADA and Code requirements (height to braille, braille size, etc)
      - Show complete dimensions and clearances required as well as performance characteristics, products or models, as apply.
    5. Placement Floor Plans:
      - Plans shall utilize Sign IDs per VA Signage Standards document.
      - It shall be acceptable to utilize multiple plans per area for organization or clarity (e.g. Area A – Room Identification Plan, Area A – Wayfinding Plan, etc.)
-

C. Shop Drawings: (For Verifications and Approval)

1. Submit accurate color thumbnail details, itemizing each instance of each sign to be fabricated for approval prior to production. Thumbnails must show final copy to be produced, material and shall list sign type and Sign ID below thumbnail. Text only lists will not be accepted.
2. All Shop drawings shall be neat, well organized and clearly legible. Elevations and plan views from the Construction Drawings may be reproduced for the sake of expedience where appropriate.
3. All shop drawings shall be drawn to scale and not subsequently reduced to fit a drawing format.
4. Submit comprehensive section drawings for sign types where applicable, including sections of all typical members. Show fabrication and installation details, including details for securing members to one another and/or to building structures. Show interior construction, reinforcements, anchorages, components and finishes. Reproduction of section drawings shown in the Construction Drawings shall not be acceptable.
5. Site Condition Verification: Where required by the VA for specific items, Signage Contractor shall inspect site to confirm installation conditions, then submit shop drawings and/or written documentation for approval indicating proposed mounting devices.

D. As-Built Drawings: Accurate color thumbnail details, itemizing each instance of each sign that was fabricated and installed. Details must show final copy produced and list sign type and Sign ID below thumbnail.

E. Samples: Color and Finish: Submit 3 each, 6 inch x 6 inch samples of all paint colors, screen colors, vinyl colors and material finishes. All paint and screen colors are to be applied to the appropriate substrate.

1. Signage Contractor to submit verification of paint manufacturer used for submittal.
2. Prior to submittal, Signage Contractor shall verify that all colors submitted as samples match accurately the samples or specifications provided by VA.

F. Prototypes: (subject to revision by the VA) Submit one full-size complete prototype each for the following Sign Types:

1. Sign Type IN-01.01.02
2. Sign type IN-110
3. Sign Type IN-111
4. Sign Type IN-301
5. Sign Type IN-310
6. Sign Type IN-320.1
7. Sign Type IN-321
8. Sign Type IN-351
9. Sign Type IN-323

G. Patterns: Submit one full size pattern each for Sign Type IN-120.1. All patterns shall be black vinyl graphics on a single carrier sheet.

H. Quality Control:

1. Samples, mock-ups and prototypes shall not be permanently installed, but shall be retained by the VA for record and quality control, unless otherwise noted by the VA.
2. If requested by VA, submit manufacturer's installation instructions for each type of specialty sign. Include only pages that are pertinent, or manufacturer's standard drawings modified to delete non-applicable data.

## 1.5 DELIVERY AND STORAGE

A. Deliver materials to job in manufacturer's original sealed containers with brand name marked thereon. Protect materials from damage.

---

- B. Package to prevent damage or deterioration during shipment, handling, storage and installation. Maintain protective covering in place and in good repair until removal is necessary.
- C. Deliver signs only when the site and mounting services are ready for installation work to proceed.
- D. Store products in dry condition inside enclosed facilities.

## 1.6 WARRANTY

- A. Construction Warranty: Comply with FAR clause 52.246-21, "Warranty of Construction".

## 1.7 APPLICABLE PUBLICATIONS:

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referenced in the text by the basic designation only.
  - B. American Architectural Manufacturers Association (AMMA):
    - 611-14.....Anodized Architectural Aluminum
    - 2603-13.....Voluntary Specification, Performance Requirements and Test Procedures for Pigmented Organic Coatings on Aluminum Extrusions and Panels.
  - C. American National Standards Institute (ANSI):
    - A117.1-09.....Accessible and Usable Buildings and Facilities.
  - D. ASTM International (ASTM):
    - A36/A36M-14.....Carbon Structural Steel
    - A240/A240M-15.....Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Application.
    - A666-10.....Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate and Flat Bar
    - A1011/A1011M-14.....Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength.
    - B36/B36M-13.....Brass Plate, Sheet, Strip, and Rolled Bar
    - B152/B152M-13.....Copper Sheet, Strip, Plate and Rolled Bar
    - B209-14.....Aluminum and Aluminum-Alloy Sheet and Plate
    - B209M-14.....Aluminum and Aluminum-Alloy Sheet and Plate (Metric)
    - B221-14.....Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes, and Tubes
    - B221M-13.....Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes, and Tubes (Metric)
    - C1036-11(R2012).....Flat Glass
    - C1048-12.....Heat-Treated Flat Glass-Kind HS, Kind FT Coated and Uncoated Glass
    - C1349-10.....Architectural Flat Glass Clad Polycarbonate
    - D1003-13.....Test Method for Haze and Luminous Transmittance of Transparent Plastics
    - D4802-10.....Poly(Methyl Methacrylate) Acrylic Plastic Sheet
  - E. Code of Federal Regulation (CFR):
    - 40 CFR 59.....Determination of Volatile Matter Content, Water Content, Density Volume Solids, And Weight Solids of Surface Coating
  - F. Federal Specifications (Fed Spec):
    - MIL-PRF-8184F.....Plastic Sheet, Acrylic, Modified.
    - MIL-P-46144C.....Plastic Sheet, Polycarbonate
  - G. National Fire Protection Association (NFPA):
    - 70-14.....National Electrical Code
-

## PART 2: PRODUCTS

### 2.1 SIGNAGE GENERAL:

- A. Provide signs of type, size and design shown on the construction documents.
- B. Provide signs complete with lettering, framing and related components for a complete installation.
- C. Provide graphics items as completed units produced by a single manufacturer, including necessary mounting accessories, fittings and fastenings.
- D. Do not scale construction documents for dimensions. Verify dimensions and coordinate with field conditions. Notify Contracting Officer Representative (COR) of discrepancies or changes needed to satisfy the requirements of the construction documents.

### 2.2 ACCEPTABLE SIGN FABRICATORS

- E. The proposed sign fabricators may be considered by the VA from these following requirements:
  - 1. Demonstrates that his/her applicable product(s) are equal in salient characteristics such as construction, quality, durability, appearance and warranty to those of the acceptable sign fabricators listed.
  - 2. Demonstrates that the key personnel to be assigned to the project have a consistent history of thorough quality control, adherence to schedule and promptness of communication equal to those of the acceptable sign fabricators listed. Said key personnel shall include the project manager, the shop supervisor, the art department supervisor and the lead installer.
  - 3. Supplies three positive references from reputable environmental graphic design consultants for comparable work.
  - 4. Is a local (California) vendor who can successfully build custom componentized systems, and demonstrates ability to provide reorders and appropriate maintenance.

### 2.3 INTERIOR SIGN MATERIALS

- A. Aluminum:
    - 1. Extruded Shapes: Provide alloy 6063; size as required, or as specified by Engineer.
    - 2. Flat Sheet: Provide alloy 3003; mill finish as specified, for all work that will receive a painted finish.
  - B. Glass:
    - 1. C. Laminated Glass: ASTM C1172 – Standard Specification for Laminated Architectural Flat Glass. Comply with applicable quality requirements for cut sizes of flat laminated glass consisting of two or more lites of glass bonded with interlayer material for use in building glazing. Polished and aris finished edges.
  - C. Stainless Steel:
    - 1. Provide Alloy #304, Number 2B, in gauge(s) called out in the Construction Drawings.
    - 2. Provide mill finish on all surfaces to be painted and brushed finish on all surfaces to remain exposed.
  - D. Cast Acrylic Sheet:
    - 1. Provide cast (not extruded or continuous cast) methyl plastic sheet, in sizes, thickness and finishes indicated, with a minimum flexural strength of 16,000 pounds per square inch when tested in accordance with ASTM D790, and a maximum allowable continuous service temperature of 176 degrees Fahrenheit.
    - 2. Cast acrylic sheet shall have a flame resistance such that application of a lighted match shall not produce melting, flashing, flaring or distortion. This material shall not ignite at a temperature less than 800 degrees Fahrenheit.
    - 3. Carefully follow manufacturer's recommended fabrication procedures regarding expansion/contraction, fastening and restraining of acrylic plastic.
-

- E. Tactile Signs (Interior Grade):
    - 1. Rowmark tactile copy tipped into sign panel with minimum 1/32" relief, screen printed to match specified color. Clear acrylic bead braille.
    - 2. Text and/or Graphics Finish: Provide multi-plastic or other paint silkscreened for high adhesion. Coating shear lines to precisely reflect letterforms and/or graphic outline contours.
    - 3. Protective Sign Finish: Provide non-glare transparent acrylic lacquer glaze.
    - 4. Acrylite P95 Colorless acrylic sign panels painted second surface with specified color, do not paint edges.
  - F. Braille: Signage Contractor shall be responsible for the accurate translation of all applicable tactile copy to Contracted Grade 2 Braille. All Braille shall be produced in accordance with California Title 24 requirements: Dots shall be 1/10 inch (2.54 mm) on centers in each cell with 2/10 inch (5.08 mm) space between cells. Dots shall be raised a minimum of 1/40 inch (0.635 mm) above the background.
  - G. Applied Tactile Copy:
    - 1. Provide 1/32" Rowmark ADA Alternative Applique in colors called out in the construction drawings.
  - H. Fasteners, Hardware and Devices: Stock proprietary fastening devices of approved standard manufacture such as cadmium plated screws, bolts and washers, and stainless steel hinges.
    - 1. Conceal all fasteners except where noted or shown otherwise.
    - 2. Finish on all exposed devices to match overall sign finish, unless otherwise noted.
    - 3. Provide vandal-resistant fasteners at all exposed locations unless otherwise noted.
    - 4. Use fasteners fabricated from metals that are noncorrosive to either the sign material(s) or the mounting surface.
  - I. Very High Bond Tape: Provide #4905/.020"/clear and/or #4950/.045"/white closed cell acrylic foam carrier with VHB adhesive, very high solvent resistance and very high shear and peel adhesion.
  - J. Magnetic Sheet: Provide MSI magnetic tape
  - K. Acrylic Polyurethane Paint:
    - 1. Provide acrylic polyurethane with ultraviolet inhibitors and lightfast, weather, abrasion and graffiti resistant. Prime and finish coats shall be mixed and applied in accordance with manufacturer's specifications. Paint finish shall be smooth, free of scratches, gouges, drops, bubbles, thickness variations, foreign matter or other imperfections.
      - a. Provide a CCR Title 24-compliant non-glare finish for all interior applications.
      - b. Provide a semi-gloss finish for all exterior applications.
    - 2. Colored Coatings for Cast Acrylic Sheet: Use paints for background color which are recommended by acrylic manufacturer for optimum adherence to acrylic surfaces and are non-fading for application intended.
    - 3. Signage Contractor shall provide verification of paint manufacturer used for all paintwork.
  - L. Screen Media:
    - 1. Screened graphics shall be produced with screening ink or paint compatible with substrate, using mesh of 390 or finer to produce clean, sharp edges. Media are to be opaque, with full even coverage, and free from hickies, dust, bubbles and/or other blemishes or foreign matter.
  - M. Paper Emergency Evacuation Plan Inserts:
    - 1. All emergency evacuation maps shall be 11' x 17" IRIS or Fiery RIP color images, matte finish, printed on paper of sufficient weight to prevent drooping or curling when inserted into the protective frame.
  - N. Vinyl Film: Provide opaque reflective or non-reflective vinyl film as indicated, 0.0355" minimum thickness, with pressure sensitive permanent adhesive backing; 3M Scotchcal or approved equal. All colors shall be integral and not surface applied except where custom color(s) are specified in the Drawings. All custom colors shall be flood coated on white vinyl.
-

## 2.4 INTERIOR SIGN TYPES:

- A. Conform to the VA Signage Design Guide.
- B. Provide sliding rail, frame, insert and frame, curved frame, component system.
- C. Component System Signs:
  - 1. Provide interior sign system as follows:
    - a. Interchangeable system that allows for changes of graphic components of the installed sign, without changing sign in this entirety.
    - b. Provide sign system comprised of following primary components:
      - 1) Rail Back: Horizontal rails, spaced to allow for uniform, modular sizing of sign types.
      - 2) Rail Insert: Mount to back of Copy Panels to allow for attachment to Rail Back.
      - 3) Copy Panels: Fabricate of ABS, Phopolymer, Acrylic, Aluminum and Stainless Steel.
      - 4) End Caps: Interlock to Rail Back to enclose and secure changeable Copy Panels.
      - 5) Joiners and Accent Joiners: To connect separate Rail Backs Together.
      - 6) Top Accent Bars: To provide decorative trim cap that encloses the top of sign.
    - c. Provide rail back, rail insert and end caps in anodized extruded aluminum.
    - d. Provide signs in system that are convertible in the field to allow for enlargement from one (1) size to another in height and width through use of joiners or accent joiners, which connect rail back panels together blindly, providing a butt joint between copy panels. Connect accent joiners to rail backs with a visible 3mm (1/8") horizontal rib, flush to the adjacent copy insert surfaces.
    - e. Provide sign configurations as indicated on construction documents that vary in width from 228 mm (9 inches) to 2032 mm (80 inches), and have height dimensions of 50 mm (2 inches), 76 mm (3 inches), 152 mm (6 inches), 228 mm (9 inches) and 305 mm (12 inches). Height that can be increased beyond 305 mm (12 inches), by repeating height module in full or in part.
  - 2. Provide rail back functions as internal structural member of sign. Fabricate of 6063T5-extruded aluminum, anodized black.
    - a. Fabricate to accept an extruded aluminum or plastic insert on either side, depending upon sign type.
    - b. Provide components that are convertible in field to allow for connection to other rail back panels.
    - c. Provide mounting devices including wall mounting for screw-on applications, wall mounting with pressure sensitive tape, freestanding mount, ceiling mount and other mounting devices as needed.
  - 3. Provide rail insert functions as mounting device for copy panels on to the rail back. The rail insert mounts the back of the copy panel with adhesive suitable for attaching particular copy insert material.
    - a. Provide copy panels that slide or snap into the horizontal rail back.
  - 4. Provide copy panels that accept various forms of copy and graphics, and attach to the rail back with the rail insert. Provide copy panels fabricated of ABS plastic with integral color or an acrylic lacquer finish, photopolymer, acrylic.
    - a. Provide copy panels that are interchangeable by sliding horizontally from either side of sign, and to other signs in system of equal or greater width or height.
    - b. Provide materials that are cleanable without use of special chemicals or cleaning solutions.
    - c. Copy Panel Materials.
      - 1) ABS Inserts: 2.3 mm (.090 inches) extruded ABS plastic core with .07 mm (.003 inches) acrylic cap bonded during extrusion/texturing process.
        - a) Pressure bonded to extruded rail insert with adhesive.
        - b) Background Color: Integral or painted in acrylic lacquer.
        - c) Finished: Texture pattern.
      - 2) Photopolymer Inserts: 3.2 mm (.125 inches) phenolic photo polymer with raised copy etched to 2.3 mm (.0937 inches), bonded to an ABS plastic or extruded aluminum insert with adhesive.
        - a) Background Color: Painted, acrylic enamel.
      - 3) Changeable Paper/ Insert Holder: Extruded insert holder with integral rail insert for connection with structural back panel in 6063T5 aluminum with a black anodized finish.

- a) Inserts into holder are paper with a clear 0.76 mm (.030 inches) textured cover.
      - b) Background Color: Painted, acrylic lacquer.
    - 4) Acrylic - 2 mm (.080 inches) non-glare acrylic.
      - a) Pressure bonded to extruded rail insert using adhesive.
      - b) Background Color: Painted in acrylic lacquer or acrylic enamel.
    - 5) Extruded 6063T5 aluminum with a black anodized finish insert holder with integral rail insert for connection with structural back panel to hold 0.76 mm (.030 inches) textured polycarbonate insert and a sliding tile which mounts in the inset holder and slides horizontally.
  - 5. End Caps: Extruded using 6063T5 aluminum with a black anodized finish. End caps interlock with rail back with clips to form an integral unit, enclosing and securing the changeable copy panels, without requiring tools for assembly.
    - a. Interchangeable to each end of sign and to other signs in signage system of equal height.
    - b. Provide mechanical fasteners that can be added to the end caps that will secure it to rail back to make sign tamper resistant.
  - 6. Joiners: Extruded using 6063T5 aluminum with a black anodized finish. Rail joiners connect rail backs together blindly, providing a butt joint between copy inserts.
  - 7. Accent Joiners: Extruded using 6063T5 aluminum with a mirror polished finish. Connect joiner and rail backs together with a visible 3 mm (.125 inches) horizontal rib, flush to the adjacent copy panel surfaces.
  - 8. Top Accent Rail: Extruded rail using 6063T5 aluminum with a mirror polished finish that provides a 3.2 mm (.125 inches) high decorative trim cap. Cap butts flush to adjacent copy panel and encloses top of rail back and copy panel.
  - 9. Typography:
    - a. Vinyl First Surface Copy (non-tactile): Applied vinyl copy.
    - b. Subsurface Copy Inserts: Textured 1 mm (.030 inches) clear polycarbonate face with subsurface applied vinyl copy.
      - 1) Spray face back with paint and laminated to extruded aluminum carrier insert.
    - c. Integral Tactile Copy Inserts: Phenolic photopolymer etched with 2.3 mm (.0937 inches) raised copy.
    - d. Silk-screened First Surface Copy (non-tactile): // Injection molded or extruded ABS plastic //  
// Aluminum // insert with first surface applied enamel silk-screened copy.
- D. Tactile Sign:
- 1. Tactile sign made from a material that provides for letters, numbers and Braille to be integral with sign. Photopolymer etched metal, sandblasted phenolic or embossed material. Do not apply letters, numbers and Braille with adhesive.
  - 2. Numbers, letters and Braille to be raised 0.8 mm (1/32 inches) from the background surface. The draft of the letters, numbers and Braille to be tapered, vertical and clean.
  - 3. Braille Dots: Conform with ANSI A117.1 for Braille position and layout; (a) Dot base diameter: 1.5 mm (.059 inches) (b) Inter-dot spacing: 2.3 mm (.090 inches) (c) Horizontal separation between cells: 6.0 mm (.241 inches) (d) Vertical separation between cells: 10.0 mm (.395 inches)
  - 4. Paint assembly specified color. After painting, apply white or other specified color to surface of the numbers and letters. Apply protective clear coat sealant to entire sign.
  - 5. Finish: Eggshell, 11 to 19 degree on a 60 degree glossmeter.
- E. Provide cork or felt on bottom or mounting bracket when sign is mounted on counter or desk.
- F. For ceiling mounted signs, provide mounting hardware on the sign that allows for sign disconnection, removal, reinstallation, and reconnection.
- G. Glass Door and Side Light Graphics:
- 1. Provide text and graphics as first surface applied stylus cut vinyl.
  - 2. Provide typeface, color, and spacing, with each message or message group on a single quick release backing sheet.
-



#### H. Dimensional Letters:

1. Provide dimensional letters that are mill or laser cut acrylic in size and thickness indicated in construction documents.
2. Provide draft of letters perpendicular to letters face.
3. Fabricate letters with square corners, such as where a letter stem and bar intersect.
4. Paint letters with acrylic polyurethane.

#### I. Specialty Signs:

1. Small Freestanding Stanchion Sign: 57 mm (2.25 inches) polished aluminum tube mounted to weighted 356 mm (14 inches) diameter polished aluminum base. Sign bracket to hold a 6 mm (.25 inches) copy panel.
2. Freestanding Informational Sign: 57 mm (2.25 inches) polished aluminum tube vertical support mounted to a weighted 356 mm (14 inches) diameter 57 mm (2.25 inches) polished aluminum base. Provide rail back mechanically connected to vertical supports with copy panel attached to front and back.
3. Freestanding Informational Signs for Changeable Messages: 57 mm (2.25 inches) polished aluminum tube vertical support mounted to a weighted 365 mm (14 inches) 57 mm (2.25 inches) polished aluminum base. Provide rail back mechanically connected to vertical supports with hinged locking glass door. Provide interior surface with grooved felt covered changeable letter board or vinyl impregnated tackboard.
4. Card or Paper Holder: Extruded aluminum clip anodized black containing rollers to pinch and release paper.
  - a. End caps are black plastic.
5. Patient Information Holder: Provide chart, file, or binder holder constructed of 18 gauge formed. Galvanized steel or aluminum painted in specified color in Section 09 06 00, SCHEDULE FOR FINISHES.
  - a. Provide polished aluminum connecting rods and buttons. Provide button covers for mounting screws that permanently attach and securely conceal screws.

#### J. Temporary Interior Signs:

1. Fabricated from 50 kg (110 pound) matte finished white paper cut to 101 mm (4 inch) wide by 305 mm (12 inch) long.
  - a. Punched 3.2 mm (.125 inch) hole with edge of hole spaced 13 mm (.5 inch) in from edge and centered on 101 mm (4 inch) side.
  - b. Reinforce hole on both sides with suitable material that prevents tie from pulling through hole.
  - c. Ties: Steel wire 0.3 mm (0.120 inch) thick attached to tag with twist leaving 152 mm (6 inch) long free ends.
2. Mark architectural room number on sign, with broad felt marker in clearly legible numbers or letters that identify room, corridor or space as shown on construction documents.
4. Install temporary signs to rooms that have a room, corridor or space number. Attach to door frame, door knob or door pull.
  - a. Doors that do not require signs are: corridor doors in corridor with same number, folding doors or partitions, toilet doors, bathroom doors within and between rooms, closet doors within rooms, communicating doors in partitions between rooms with corridor entrance doors.
  - b. Replace and missing, damaged or illegible signs.

## 2.3 FABRICATION

#### A. Intent of Specifications: All finished work shall be of the highest quality in order to pass eye-level examination and scrutiny by VA. Provide product exactly as specified in drawings.

1. All Work shall be free from burrs, dents, raw edges and sharp corners.
  2. Finish all welds on exposed surfaces as required so they are not visible in the finished Work.
  3. Finish all surfaces smooth unless otherwise indicated or specified.
  4. Surfaces, which are intended to be flat, shall be free from bulges, oil-canning, gaps or other physical deformities. Such surfaces shall be fabricated to remain flat under installed conditions.
  5. Surfaces, which are intended to be curved, shall be smoothly free-flowing to the required shape(s).
-

6. Fabricate all cabinets, panels and components with smooth, mechanically finished edges. All edges shall be true, and all corners shall be square. Where edges are specified to be painted, fill and sand smooth as required prior to painting.
  7. Cut routed letterforms and/or graphics clean and true to match adjacent surface-applied letterforms and/or graphics.
  8. Fabricate all internally illuminated sign cabinets as required to provide a weathertight housing for all lighting and electrical components.
  9. Exercise care to protect all polished and/or plated surfaces so that they remain unblemished in the finished Work.
  10. Isolate dissimilar materials. Exercise particular care to isolate nonferrous metals from ferrous metals as required to prevent corrosion.
  11. All surfaces shall be flat to a tolerance of plus or minus 1/16" when measured at any point with a ten foot straight edge.
  12. All visible sign surfaces of the same type shall have the same finish. Color and/or finish shall be consistent across the entire surface of a sign.
  13. All reveals shall be of uniform width; all butt joints shall be tight and closed along the entire length; all access panels shall have a nominal, uniform gap all around.
  14. All expansion joints, when required, shall be positioned so as not to interfere with the look or finish of any sign message or the overall appearance of the sign face.
  15. All gaps between milled components, when assembled, shall not exceed a tolerance of .005".
  16. Frameless signs shall have no side rails.
  17. Magnetic strip to cover entire surface of removable panels.
  18. Edges of acrylite material shall not to be painted.
- B. Provide colors and/or finish textures as specified or indicated in the Drawings or, where not specified or indicated, as selected by VA.
1. Interior Colors/Finishes: Colors of sign graphics (text, arrows and/or symbols) shall have a minimum of 70% contrast with sign background behind graphics. Finish shall be non-glare on all sign backgrounds behind graphics on identifications and directional signs.
- C. Graphics: All text, arrows and symbols shall be provided in the sizes, colors, typefaces and spacing specified in the Drawings. All text shall be a true, clean, digitally or photomechanically accurate reproduction of the typeface(s) specified, with letterspacing and directional arrows as shown in the Drawings.
1. Lettering: Custom Typography: Use Adobe Type Library, Helvetica Bold and Helvetica Bold Condensed.
  2. Arrows and Symbols: Use digital files provided by VA in Adobe Illustrator for Macintosh.
- D. Sign Schedule: Copy shown in the Drawings is for layout purposes only; all final copy, quantities and references for all signs are shown in the Sign Schedule unless otherwise noted. The Signage Contractor shall clarify any perceived irregularities in the Sign Schedule with the VA and present thumbnail shop drawings for approval prior to fabrication.
- E. Digital Artwork: All digital artwork files prepared by the VA for the Signage Contractor's use shall be in a single layer. Any and all manipulations of the files required for subsequent use by the Signage Contractor, such as spreads and traps for silkscreen negatives, or conversion to outline or EPS, shall be the responsibility of same unless explicitly agreed otherwise by the VA.
- F. Artwork for Emergency Evacuation Plans (EEPs):
1. Designer shall produce one representative EEP to serve as a model for graphic layout, graphic conventions, colors and color distribution.
  2. Designer shall submit same to the VA for review and approval relative to the requirements of California Title 19, and the specific, additional requirements of the Palo Alto Fire Department if applicable.
-

3. After said approval has been obtained, Designer shall provide digital artwork for the approved EEP only to the Signage Contractor. This file will serve as a template for the Contractor's use.
4. The digital artwork for all other required EEPs as listed in the Sign Schedule, and any and all required approvals of same by the VA shall be the sole responsibility of the Contractor as set forth at Section 1.4 above.

## PART 3: EXECUTION

### 3.1 INSPECTION

- A. VA reserves the right to inspect the Work in the Signage Contractor's shop before it is shipped to the job site for installation.
- B. Signage Contractor shall inspect all installation locations for conditions which will adversely affect the execution, permanence and/or quality of the Work, and notify VA in writing of any and all unsatisfactory conditions. Signage Contractor shall not proceed with installation until said unsatisfactory conditions have been corrected. Commencement of installation indicates acceptance of site conditions and guarantees delivery of an acceptable product.

### 3.2 INSTALLATION

- A. Pre-installation Walkthrough / Field-Staking: Attend a pre-installation walkthrough at the job site to confirm all typical installation conditions and determine installation locations for nontypical conditions.
- B. Provide backing for heavier signs where required. Coordinate locations of wall backing with VA.

### 3.3 SIGN LOCATIONS

- A. All signs identifying permanent rooms and spaces shall be located in compliance with Architectural Barriers Act Accessibility Guidelines – Section 703: Sign to be located at latch side of door, or, if there is insufficient wall space, on the nearest wall, preferably to the right.
- B. Firefighters' Information signs in enclosed stairwells shall be located in compliance with NFPA 101/VA Standards and Architectural Barriers Act Accessibility Guidelines – Section 703: Bottom of sign to be 4'-0" above stair landing floor or as directed by the VA. Sign shall be placed beyond door swing for optimal visibility from stair legs above and below landing.
- C. Emergency Evacuation Map: Bottom of sign to be 4'-0" above finish floor or as directed by the VA.

### 3.4 SITE CLEANUP

- A. Final cleanup:
  1. Clean and/or repair all evidence of installation work or damage to site work or other adjacent surfaces prior to completion of work.
  2. Clean up work area after all installation has been completed. Restore all disturbed ground cover.
  3. Remove all protective materials and dispose of properly off site.

### 3.5 CLEANING AND PROTECTION

- A. At completion of installation, clean all sign surfaces in accordance with manufacturer's instructions.
  - B. Protect all signs from damage until acceptance by VA; repair or replace damaged units as required.
  - C. Clean and/or repair all evidence of installation work or damage to adjacent surfaces prior to completion of work.
  - D. Remove all protective materials and dispose of properly off site.
-

3.6 CONTRACT CLOSE-OUT ITEMS

- A. Provide Owner with one quart of paint for each paint color specified.
- B. Provide Owner with written instructions for proper cleaning of the signs. Note any solvents that should not be used.
- C. Provide Owner with template(s) in an open license application or Microsoft Word, that shall auto scale the copy to fit each sign appropriately for creating new sign inserts in house on any standard computer or printer.

END OF SECTION