

SECTION 101423

PANEL SIGNAGE

PART 1 - GENERAL

1.1 STIPULATIONS

- A. The specifications sections "General Conditions of the Construction Contract", "Special Conditions", and "Division 1 - General Requirements" form a part of this Section by this reference thereto, and shall have the same force and effect as if printed herewith in full.

1.2 SUMMARY

- A. Section Includes:
 - 1. Panel signs for way-finding for elevator usage.

1.3 COORDINATION

- A. Furnish templates for placement of sign-anchorage devices embedded in permanent construction by other installers.
- B. Furnish templates for placement of electrical service embedded in permanent construction by other installers.

1.4 SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: For panel signs.
 - 1. Include fabrication and installation details and attachments to other work.
 - 2. Show sign mounting heights, locations of supplementary supports to be provided by others, and accessories.
 - 3. Show message list, typestyles, graphic elements and Braille, and layout for each sign at least half size.
- C. Samples for Verification: 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: Full-size Sample.
- D. Qualification Data: For Installer and manufacturer.

1.5 WARRANTY

- A. Special Warranty: 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 finishes beyond normal weathering.
 - b. Deterioration of graphics.
 - c. Separation or delamination of sheet materials and components.
 - 2. Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Accessibility Standard: Comply with applicable provisions in ICC A117.1 for signs.

2.2 SIGNS

- A. Basis-of-Design Product: Subject to compliance with requirements, provide product indicated or comparable product by one of the following as approved by the Professional.
 - 1. Advance Corporation; Braille-Tac Division.
 - 2. Allen Industries, Inc.
 - 3. APCO Graphics, Inc.
 - 4. Best Sign Systems Inc.
 - 5. Mohawk Sign Systems.
 - 6. Nelson-Harkins Industries.
 - 7. Vomar Products, Inc.
- B. Panel Sign S-1 thru S-4: Sign with smooth, uniform surfaces; with message and characters having uniform faces, sharp corners, and precisely formed lines and profiles; and as follows:
 - 1. Basis-of-Design Product: 3D Form™; ASI Sign Systems, Inc.
 - 2. Solid-Sheet Sign and Back: Bronze sheet with finish specified in "Surface Finish and Applied Graphics" Subparagraph below and as follows:
 - a. Thickness: 0.25 inch (6.35 mm).
 - b. 3D Printed Raised Graphics: Sign face to include raised graphics indicated and braille via 3D printing with UV cured LED inks.
 - 1) Height: 1/16-inch.
 - 3. Sign-Panel Perimeter: Finish edges smooth to match sign face.
 - a. Edge Condition Square cut.
 - b. Corner Condition in Elevation: Square.
 - 4. Frame: Frameless panel sign.

5. Mounting: Surface mounted to wall with double stick tape and silicone adhesive.
6. Surface Finish and Applied Graphics:
 - a. Integral Metal Finish: No. 6 dull polished finish.
 - b. Graphics Finish: Manufacturer's standard, 3D LED UV cured satin finish ink; color "black."
7. Text and Typeface: Accessible raised characters and Braille, Helvetica upper case. Finish raised characters in black and finish Braille to match.
8. Flatness Tolerance: Sign panel shall remain flat or uniformly curved under installed conditions as indicated and within a tolerance of plus or minus 1/32 inch.

2.3 PANEL-SIGN MATERIALS

- A. Bronze Plate: C385 Architectural Bronze.
- B. Paints and Coatings for Sheet Materials: Inks, dyes, and paints that are recommended by manufacturer for optimum adherence to surface and are UV and water resistant for colors and exposure indicated.

2.4 ACCESSORIES

- A. Adhesives: As recommended by sign manufacturer and with a VOC content of 70 g/L or less for adhesives used inside the weatherproofing system and applied on-site when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
- B. Two-Face Tape: Manufacturer's standard high-bond, foam-core tape, 0.045 inch (1.14 mm) thick, with adhesive on both sides.

2.5 FABRICATION

- A. General: Provide manufacturer's standard sign assemblies according to requirements indicated.
 1. Preassemble signs and assemblies in the shop to greatest extent possible. Disassemble signs and assemblies only as necessary for shipping and handling limitations. Clearly mark units for reassembly and installation; apply markings in locations concealed from view after final assembly.
 2. Mill joints to a tight, hairline fit. Form assemblies and joints exposed to weather to resist water penetration and retention.
 3. Comply with AWS for recommended practices in welding and brazing. Provide welds and brazes behind finished surfaces without distorting or discoloring exposed side. Clean exposed welded and brazed connections of flux, and dress exposed and contact surfaces.
 4. Conceal connections if possible; otherwise, locate connections where they are inconspicuous.
 5. Internally brace signs for stability and for securing fasteners.
 6. Provide rebates, lugs, and brackets necessary to assemble components and to attach to existing work. Drill and tap for required fasteners. Use concealed fasteners where possible; use exposed fasteners that match sign finish.

- B. 3D Printed Raised Graphics: 3D print graphics onto specified panels to create raised characters and other graphic devices into panel surface indicated to produce precisely formed copy, raised to uniform height.

- 1. Finish face of raised graphics in color indicated.

2.6 GENERAL FINISH REQUIREMENTS

- A. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- B. Appearance of Finished Work: Noticeable variations in same piece are not acceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.
- C. Directional Finishes: Run grain with long dimension of each piece and perpendicular to long dimension of finished trim or border surface unless otherwise indicated.
- D. Organic, Anodic, and Chemically Produced Finishes: Apply to formed metal after fabrication but before applying contrasting polished finishes on raised features unless otherwise indicated.

2.7 BRONZE FINISHES

- A. Surface Preparation: Remove tool and die marks and stretch lines, or blend into finish.
- B. Polished Finishes: Grind and polish surfaces to produce uniform finish, free of cross scratches.
 - 1. Dull Satin Finish: No. 6.

PART 3 - EXECUTION

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 signage work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. General: Install signs using mounting methods indicated and according to manufacturer's written instructions.
 - 1. Install signs level, plumb, true to line, and at locations and heights indicated, with sign surfaces free of distortion and other defects in appearance.
 - 2. Install signs so they do not protrude or obstruct according to the accessibility standard.
 - 3. Before installation, verify that sign surfaces are clean and free of materials or debris that would impair installation.

B. Mounting Methods:

1. Adhesive: Clean bond-breaking materials from substrate surface and remove loose debris. Apply linear beads or spots of adhesive symmetrically to back of sign and of suitable quantity to support weight of sign after cure without slippage. Keep adhesive away from edges to prevent adhesive extrusion as sign is applied and to prevent visibility of cured adhesive at sign edges. Place sign in position and push to engage adhesive. Use two-face tape to temporarily support sign in position until adhesive fully sets.

- C. Signs Mounted on Glass: Provide opaque backer panel matching sign material and finish onto opposite side of glass to conceal back of sign.

3.3 ADJUSTING AND CLEANING

- A. Remove and replace damaged or deformed signs and signs that do not comply with specified requirements. Replace signs with damaged or deteriorated finishes or components that cannot be successfully repaired by finish touchup or similar minor repair procedures.
- B. Remove temporary protective coverings and strippable films as signs are installed.
- C. On completion of installation, clean exposed surfaces of signs according to manufacturer's written instructions and touch up minor nicks and abrasions in finish. Maintain signs in a clean condition during construction and protect from damage until acceptance by Department and Client Agency.

3.4 SIGNAGE SCHEDULE

A. Type S1:

1. Width: 12 inches.
2. Height: 7 inches.
3. Copy Height: 1 inch.
4. Copy Position: Center justified both horizontally and vertically.
5. Copy:

ELEVATORS TO
CAPITOL
EAST WING
(Braille)

B. Type S2:

1. Width: 12 inches.
2. Height: 7 inches.
3. Copy Height: 1 inch.
4. Copy Position: Center justified both horizontally and vertically.
5. Copy:

ELEVATORS TO
PARKING GARAGE
AND LEVEL 1
(Braille)

C. Type S2A:

1. Width: 12 inches.
2. Height: 7 inches.
3. Copy Height: 1 inch.
4. Copy Position: Center justified both horizontally and vertically.
5. Copy:

ELEVATORS TO
CONCOURSE
AND PARKING GARAGE
(Braille)

D. Type S3:

1. Width: 12 inches.
2. Height: 7 inches.
3. Copy Height: 1 inch.
4. Copy Position: Center justified both horizontally and vertically.
5. Copy:

ELEVATOR TO
LEVEL 1
ONLY
(Braille)

E. Type S4:

1. Width: 12 inches.
2. Height: 7 inches.
3. Copy Height: 1 inch.
4. Copy Position: Center justified both horizontally and vertically.
5. Copy:

ELEVATOR TO
CONCOURSE LEVEL
ONLY
(Braille)

END OF SECTION 101423