

SECTION 10 11 01  
VISUAL DISPLAY BOARDS

**PART 1 GENERAL**

**1.1 SECTION INCLUDES**

- A. Markerboards

**1.2 REFERENCE STANDARDS**

- A. ASTM A424 - Standard Specification for Steel, Sheet, for Porcelain Enameling; 2009a.
- B. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2013a.
- C. ASTM F793 - Standard Classification of Wall Covering by Use Characteristics; 2010a.
- D. FS L-P-1040 - Plastic Sheets and Strips (Polyvinyl Fluoride); Federal Specifications and Standards; Revision B, 1977.

**1.3 WARRANTY**

- A. See Section 01 7800 - Closeout Submittals, for additional warranty requirements.
- B. Provide 25 year warranty for markerboards to include warranty against discoloration due to cleaning, crazing or cracking, and staining.

**PART 2 PRODUCTS**

**2.1 MARKERBOARDS**

- A. Porcelain enamel on steel, laminated to core.
  - 1. Metal Face Sheet Thickness: 28 gage or heavier.
  - 2. Core: 7/16" min. thickness, Particleboard, manufacturer's standard thickness, laminated to face sheet.
  - 3. Backing: .15" thick, Aluminum sheet
  - 4. Sizes: 4' x 12'
  - 5. Frame: Natural anodized (continuous), Extruded aluminum, with concealed fasteners.
- B. Manufacturer:
  - 1. ADP/Lemco: [www.adplemco.com](http://www.adplemco.com)
  - 2. Claridge Products and Equipment, Inc: [www.claridgeproducts.com](http://www.claridgeproducts.com)
  - 3. Ghent Manufacturing: [www.ghent.com](http://www.ghent.com)
  - 4. Marsh Industries: [www.marsh-ind.com](http://www.marsh-ind.com)
  - 5. Magnatag Visible Systems: [www.magnatag.com](http://www.magnatag.com)
  - 6. Nelson/Adams: [www.nelsonadamsnaco.com](http://www.nelsonadamsnaco.com)
  - 7. Polvision: [www.polyvisino.com](http://www.polyvisino.com)

## **2.2 ACCESSORIES**

- A. Map Rail: Extruded aluminum, manufacturer's standard profile, with cork insert and runners for accessories; 1 inch wide overall, full width of frame. Provide end caps for all map rail/tackstrip ends.
- B. Mounting Brackets: Concealed.

## **PART 3 EXECUTION**

### **3.1 INSTALLATION**

- A. Install boards in accordance with manufacturer's instructions.
- B. Use manufacturer's wall clips at top and bottom of boards, spaced not to exceed 24" O.C.
- C. Apply mastic on back of boards adequately to prevent boards from bowing away from wall surface. Apply in an alternating (2-1-2) pattern at 24" on-center for full length of board.
- D. Brackets to be fastened to wall with screws in proper anchor inserts for each wall material encountered. Installation on gypsum wallboard walls shall be into solid continuous firetreated wood blocking.
- E. Provide map rails with concealed screws in proper anchor inserts for each wall material encountered. Spacing of screws not to exceed 24" on-center. Provide end stops on all terminal ends.
- F. Secure units level and plumb.
- G. Install in locations indicated on Drawings

### **3.2 CLEANING**

- A. Clean board surfaces in accordance with manufacturer's instructions.

END OF SECTION  
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SECTION 10 14 00  
SIGNAGE

**PART 1 - GENERAL**

**1.01 SUMMARY OF WORK:**

- A. Provide identifying devices as specified herein, and as needed for a complete and proper installation including, but not necessarily limited to:

- 1. International Symbols of Accessibility.

**1.02 RELATED DOCUMENTS:**

- A. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
- B. Reference Architectural sheets.

**1.03 QUALITY ASSURANCE:**

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- B. Manufacturer shall have not less than five (5) years experience in the manufacturing of products specified.
- C. Installation Contractor shall have not less than five (5) years of successful experience in the installation of products specified.
- D. Warranty: Provide written warranty for a period of two (2) years system and finish.
- E. Signage shall comply with A.D.A.A.G.

**1.04 SUBMITTALS:**

- A. Comply with pertinent provisions of Section 01 33 00.
- B. Product data: After the Contractor has received the Owner's Notice to Proceed, submit:
  - 1. Materials list of items proposed to be provided under this Section;
  - 2. Manufacturer's specifications and other data needed to prove compliance with the specified requirements

3. Details of installation and anchorage sufficient to enable proper interface to the work of this Section with the work of other trades.
4. Manufacturer's recommended installation procedures which, when approved by Architect, will become the basis for accepting or rejecting actual installation procedures used on the Work.

## **PART 2 - PRODUCTS**

### **2.01 ACCEPTABLE MANUFACTURERS:**

- A. Match existing adjacent signage.
- B. Provide the products upon which design is based, or provide equal products of one of the following manufacturers:
  1. ASI Sign Systems [www.asisignage.com](http://www.asisignage.com)
  2. Best Signs [www.bestsigns.com](http://www.bestsigns.com)
  3. Communication Industries, Inc. Golden, CO
  4. Division Ten Signage Corp [www.division10sign.com](http://www.division10sign.com)
  5. Platte Valley Signs. Aurora, CO
  6. Signage, Inc.
  7. Signworks, LLC. [www.wearesignworks.com](http://www.wearesignworks.com)
- C. Except as otherwise approved by the Architect, provide all products of this Section from a single manufacturer.

### **2.02 ROOM SIGNAGE:**

- A. Provide sign plaques with the following attributes:

Provide 7" x 9" identification sign with:

- a. ½" radius corners
- b. 1/8" thick acrylic faces permanently laminated to a backplate of similar material.
- c. Lettering: 1/32" raised, 1" high Helvetic Medium
- d. Symbol: 1/32" raised, 3" high minimum
- e. Braille: Grade 2, raised 1/32"

1. Type: Match existing or Helvetica Medium.
2. Margins:
  - a. For room number, ½" left margin and 1 1/8" top margin.
  - b. For room titles, ½" left margin; lined up below room number.
3. Color: Match existing
4. Mounting: Double-sided 1/32" thick foam tape.
6. Materials: Provide extruded methacrylate plastic sheet with a minimum flexural strength of 7,000 psi. ASTM D790, minimum allowable continuous service temperature of at least 180°F.

Door Sign Locations: Each **new** door shall have signage plaques. All signs shall receive a number and a room name -typical for all locations. Maximum four (4) characters for room numbers, maximum 15 characters for room names. Comply with the mounting location and height requirements of A.D.A.A.G. Section 4.306.

#### **2.04 SIGNAGE TECHNICAL REQUIREMENTS:**

- A. Signs which designate permanent rooms and spaces shall comply with the requirements listed below for:
  1. Raised and Brailled Characters and Pictograms.
  2. Finish and Contrast.
  3. Mounting Location and Height.
- B. Signs which provide direction to, or information about, functional spaces of the building shall comply with the requirements listed below for:
  1. Character Proportion.
  2. Character Height.
  3. Finish and Contrast.
- C. Character Proportion: Letters and numbers on signs shall have a width-to-height ratio between 3:5 and 1:1, and a stroke-width-to-height ration between 1:5 and 1:10.
- D. Character Height: Characters and numbers on signs shall be sized according to the viewing distance from which they are to be read.
  1. For signs higher than 80" above the finish floor, character size shall be 3" minimum.
  2. The minimum height is measured using an upper case X.

3. Lower case letters are permitted.
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- E. Raised and Brailled Characters and Pictograms: Letters and numerals shall be raised 1/32", upper case, sans serif or simple serif type and shall be accompanied by grade 2 Braille.
    1. Raised character height:   " minimum, 2" high maximum.
    2. Pictograms shall be accompanied by the equivalent verbal description placed directly below the pictogram.
    3. The border dimension of the pictogram shall be 6" minimum.
  - F. Finish and Contrast: The characters and background of signs shall be eggshell, matte, or other non-glare finish. Characters and symbols shall contrast with their background (either light characters on a dark background or dark characters on a light background).
  - G. Mounting Location and Height: Where permanent identification is provided for rooms and spaces, signs shall be installed on the wall adjacent to the latch side of the door.
    1. Where there is no wall space to the latch side of the door, including at double-leaf doors, signs shall be placed on the nearest adjacent wall.
    2. Mounting height shall be 60" above the finish floor to the centerline of the sign.
    3. Mounting location for such signage shall be so that a person may approach within 3" of sign.
  - J. Symbols of Accessibility:
    1. Facilities and elements required to be identified as accessible shall use the International Symbol of Accessibility.

### **PART 3 - EXECUTION**

#### **3.01 SURFACE CONDITIONS:**

- A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

**3.02 INSTALLATION:**

- A. Install the work of this Section in strict accordance with the manufacturers' recommendations as approved by the Architect, using only the approved mounting materials, and locating all components firmly into position, level and plumb.
- B. Replace/repair any damaged work.

**END OF SECTION 10 14 00**

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SECTION 10 28 00  
TOILET, BATH, AND LAUNDRY ACCESSORIES

**PART 1 - GENERAL**

**1.01 DESCRIPTION OF WORK:**

- A. Provide all labor, material and equipment required for the installation of toilet, and janitors room accessories including, but not necessarily limited to mounting devices and concealed anchors.
- B. Furnish templates as required to coordinate with work of other sections of the specifications.

**1.02 RELATED WORK:**

- A. Section 09 21 00 - Gypsum Board Assemblies
- B. Toilet Accessory Schedule is on Sheet A-3

**1.04 REFERENCES:**

- A. Codes/Standards: Meet requirements of standard listed.
- B. Quality Assurance:
  - 1. Approved Manufacturers:
    - a. Accessories shall be products of a single manufacturer.

**1.05 MAINTENANCE:**

- 1. Toilet and bath accessories must accommodate owners standard purchase refills if applicable.

**1.07 PRODUCT DELIVERY, STORAGE, AND HANDLING:**

- A. Deliver items in manufacturer's original unopened protective packaging.
- B. Store materials in original protective packaging to prevent soiling, physical damage, or wetting.
- C. Handle so as to prevent damage to finished surfaces.
- D. Protection:
  - 1. Maintain protective covers on all units until installation is complete.
  - 2. Remove protective covers at final clean-up of installation.

**1.08 WARRANTY:**

- A. Provide written system and finish warranty for a period of two (2) years.

**PART 2 - MATERIALS**

**2.01 GRAB BARS**

- A. Manufactures
  - 1. ASI (Basis of Design)
  - 2. Bobrick
  - 3. Bradley
- B. 18-8, type-304, 18-gauge (1.2mm), stainless steel tubing with satin-finish, 1 ¼" (32mm) outside diameter. Ends are heliarch welded to concealed mounting flanges. Clearance between the grab bar and wall is 1 ½"



- C. Concealed mounting flanges - 18-8, type-304, 11-gauge (3.2mm) thick, stainless-steel plate; end flanges, 2" x 3 1/8" with holes for attachment to wall. Intermediate flanges 2 5/8" x 3 1/8" wide x 3 1/8" diameter

#### **2.02 PAPER TOWEL DISPENSER**

- A. Manufactures
  - 1. ASI (Basis of Design)
  - 2. Bobrick
  - 3. Bradley
- B. Stainless steel; seamless wall flanges, continuous heavy-duty stainless steel multi-staked piano hinges, tumbler locks on upper and lower doors.

#### **2.03 TOILET PAPER DISPENSER**

- A. Manufactures
  - 1. ASI (Basis of Design)
  - 2. Bobrick
  - 3. Bradley
- B. Roll-in-reserve type, designed to allow automatic activation of reserve roll when needed, or manual activation by pressing release bar, semi-recessed, stainless steel unit with pivot hinge, tumbler lock.

#### **2.04 SOAP DISPENSER**

- A. Manufactures
  - 1. ASI (Basis of Design)
  - 2. Bobrick
  - 3. Bradley
- B. Liquid soap dispenser, with stainless steel cover and horizontal stainless steel tank and working parts; push type soap valve, check valve, and window gauge refill indicator, tumbler lock.

#### **2.05 MIRROR**

- A. Manufactures
  - 1. ASI (Basis of Design)
  - 2. Bobrick
  - 3. Bradley
- B. Stainless steel type 430, one piece, channel frame with 90 mitered corners
- C. 1/4" float glass

#### **2.06 MATERIALS:**

- A. Provide products of the same finish for each type of accessory unit and for unit sets within the same area.

#### **2.07 FABRICATION:**

- A. Fabricate recessed units with seamless one-piece flange on exposed face.
- B. Locked dispensing units: Key alike for all accessories.
- C. Weld corners, leaving no open miters.

- D. All equipment except grab bars minimum 22 gauge.
- E. Grab bars, minimum 18 gauge and 1½" o. d.

**PART 3 - EXECUTION**

**3.01 INSPECTION:**

- A. Check opening schedule to receive recessed units for correct dimensions, plumbness of blocking or frames, and preparation that would affect installation of accessories.
- B. Check areas to receive surface mounted units for conditions that would affect quality and execution of work.
- C. Do not begin installation of washroom accessories until openings and surfaces are acceptable.
- D. Carefully review drawings for correct locations and mounting heights.
- E. Coordinate with Section 06 10 00 for correct locations of wood blocking, etc.

**3.02 INSTALLATION:**

- A. Drill holes to correct size and application that is concealed by item, with ¼" tolerance.
- B. Mount recessed accessories into wall openings with wood screws through cabinet side into wood blocking.
- C. Mount surface mounted accessories to concealed anchors.
- D. Lock grab bars to concealed mounting plate installed in wall.
- E. Use only theft-proof fasteners.

**3.03 ADJUST AND CLEAN:**

- A. Adjust accessories for proper operation.
- B. After completion of installation, clean and polish all exposed surfaces.
- C. Deliver keys and instruction sheets to the Owner.

END OF SECTION 10 28 00