

## **DIVISION 10 – SECTION 10 11 00 – VISUAL DISPLAY SURFACES**

### **PART 1 – GENERAL**

#### **1.01 DESCRIPTION OF WORK**

- A. Section Includes:
  - 1. Fixed Panel Porcelain Enamel Steel Markerboards
  - 2. Sliding Panel Porcelain Enamel Steel Markerboards

#### **1.02 REFERENCED STANDARDS**

- A. American Society for Testing Materials
  - 1. ASTM E84 Standard Test Method for Surface Burning Characteristics for Building Materials
  - 2. ASTM B221 Standard Specification for Aluminum and Aluminum Alloy Extruded Bars, Rods, Wires, Profiles and Tubes
- B. Porcelain Enamel Institute
  - 1. PEI-1002 Manual and Performance Specifications for Porcelain Enamel Writing Surfaces
- C. GREENGUARD Environmental Institute
  - 1. GREENGUARD Certified. UL2818-2013 Standard for Chemical Emissions for Building Materials, Finishes and Furnishings.
  - 2. GREENGUARD Gold Certified. UL2818-2013 Gold Standard for Chemical Emissions for Building Materials, Finishes and Furnishings.

#### **1.03 SUBMITTALS**

- A. Shop Drawings: Provide shop drawings for each type of visual display board required.
- B. Product Data: Provide technical data for materials specified. Include Material Safety Data Sheets, when applicable.
- C. Samples and color charts: Provide Manufacturer's color charts and composition samples of face, core, backing and trim to illustrate finish, color and texture, where required.
- D. Manufacturer's Instructions: Provide Manufacturer's installation and cleaning instructions.

#### **1.04 QUALITY ASSURANCE**

- A. Manufacturer Qualifications:
  - 1. Manufacturer shall be a firm engaged in the manufacture of visual display boards in the United States.
  - 2. Manufacturer shall have a minimum of 5 years experience in the manufacture of visual display boards.
- B. Regulatory Requirements: Conforms to applicable code for flame/smoke rating in tackboards in accordance with ASTM E84.
- C. Product Certifications: Provide GREENGUARD /GREENGUARD Gold certificates for markerboard surfaces, as applicable.
- D. Operation and Maintenance: Include data on regular cleaning, stain removal, and precautions.

#### **1.05 PROJECT CONDITIONS**

- A. Field measure prior to preparation of shop drawings and fabrication to ensure proper fit.
- B. Comply with manufacturer's recommendations for acclimating area for interior moisture and temperature to approximate normal occupied conditions.

#### **1.06 DELIVERY, STORAGE AND HANDLING**

- A. Schedule delivery of visual display boards with spaces sufficiently complete so that visual display boards can be installed upon delivery.
- B. Store products in manufacturer's unopened packaging until ready for installation.
- C. Store materials protected from exposure to harmful weather conditions and at temperatures and humidity conditions recommended by manufacturer.

#### 1.07 WARRANTY

- A. Submit a "Life of the Building" warranty, stating that under normal usage and maintenance, and when installed in accordance with manufacturer's instructions and recommendations, Claridge porcelain enamel steel markerboard writing surfaces are guaranteed for the Life of the Building. Guarantee covers replacement of defective boards but does not include cost of removal or reinstallation.
- B. Submit a standard warranty, stating that when installed in accordance with manufacturer's instructions and recommendations, Claridge tackboards are guaranteed for one year against defects in materials and workmanship. Guarantee does not cover normal wear and tear, improper handling, any misuse, or any defects caused by vandalism or subsequent abuse. Guarantee covers replacement of defective material but does not include cost of removal or reinstallation.
- C. Writing Surface Warranty Period: (Specify term) \_\_\_\_ years commencing on Date of Substantial Completion.

### PART 2 – PRODUCTS

#### 2.01 MANUFACTURERS

- A. Visual Display Board Manufacturer: Claridge Products and Equipment, Inc., Harrison, Arkansas 72601; Toll Free: 800-434-4610; Telephone: 870-743-2200; Fax: 870-743-1908; E-mail: [claridge@claridgeproducts.com](mailto:claridge@claridgeproducts.com); website: [www.claridgeproducts.com](http://www.claridgeproducts.com).

#### 2.02 PORCELAIN ENAMEL MARKERBOARD

- A. Writing Surface Face Sheet – Manufactured in accordance with Porcelain Enamel Institute's specification.
  - 1. Shall be enameling grade cold rolled steel.
  - 2. Enameling grade steel shall be coated with LCS<sup>3</sup> Porcelain Enamel
    - a. 3-Coat process shall include:
      - i. Bottom Ground Coat – 1.5 to 2.2 mils
      - ii. Top Ground Coat – 2.0 to 2.8 mils
      - iii. Top Cover (Color) Coat – 3.0 to 4.0 mils
  - 3. Firing Temperature: Enamel shall be fired at lowest possible temperatures to reduce steel and porcelain stresses and achieve superior enamel and hardness.
  - 4. Color: As selected by architect from manufacturer's standards. Color charts furnished on request. NOTE: LCS<sup>3</sup> No. 100 Low Gloss can be used as a projection surface.
- B. Fixed Markerboard Panel Make-Up
  - 1. Face Sheet: (Specify LCS<sup>3</sup> porcelain enamel steel Markerboard)
  - 2. Core Material: (Specify 7/16" Medium Density Fiberboard)
  - 3. Backing: (Specify Moisture Barrier Back)
  - 4. Series: (Specify Evolve)
  - 5. Size: (Specify writing surface panel length and height.) Standard fixed panel size 4' x 4' up to 4' x 16'

6. Color: (Specify Lcs<sup>3</sup> No. 100 White.) Color charts/sample furnished on request. NOTE: LCS<sup>3</sup> No. 100 Low Gloss can be used as a projection surface. on request. NOTE: LCS<sup>3</sup> No. 100 Low Gloss can be used as a projection surface.
7. Snap-in Accessory Tray, approx. 2" wide, furnished with each fixed markerboard
- C. Sliding Markerboard Panel Make-Up
  1. Face Sheet: (Specify LCS<sup>3</sup> porcelain enamel steel markerboard)
  2. Core Material: (Specify 7/16" Honeycomb)
  3. Panel Backing: (Specify Moisture Barrier Back)
  4. Series: (Specify Evolve Sliding Panel)
  5. Size: (Specify size) Standard sliding panel size 3' x 4' and 4' x 4'.
  6. Color: (Specify color) LCS<sup>3</sup> No. 100 White can be used for projection. Color charts furnished on request.
  7. Snap-in Accessory Tray, approx. 2" wide, furnished with each sliding markerboard panel

## 2.03 ALUMINUM TRIM

- A. Trim shall be 6063 alloy grade aluminum with T5 tempering in accordance with ASTM B221, and shall have 201-R1 satin anodize finish. (Color Anodize and Powder Coat finishes optional)
  1. Fixed Panel Trim
    - a. Series: (Specify Evolve Series with 5/16" wide low profile face trim on left and right sides, with a 2-3/8" wide face trim at top and bottom)
    - b. Finish: (Specify satin anodize unless optional finish required)
  2. Fixed and Sliding Panel Trim
    - a. Top and Bottom trim: 2-3/8" wide face with built-in track to accept sliding panel
    - b. Left and Right Side trim: 5/16" wide face
    - c. Finish: (Specify satin anodize unless optional finish required)
- B. Accessories:
  1. Two 1-1/2" diameter nylon rollers for top and two nylon rollers for bottom of each sliding panel. Attached, rollers move freely in track allowing panel to be easily repositioned from side to side.
  2. Optional accessories include:
    - a. LCS Markers
    - b. Microfiber eraser cloth
    - c. Felt eraser
- C. Fixed Board Hanging Devices: Concealed Z-clip hangers at top; dual-lock washer and tab at bottom

## PART 3 – EXECUTION

### 3.01 PROJECT CONDITIONS

- A. Verify before installation that interior moisture and temperature approximate normal occupied conditions.
- B. Verify that wall surfaces are true and plumb and are prepared and ready to receive boards.

### 3.02 INSTALLATION

- A. Deliver factory built units completely assembled and of dimensions shown in details and in accordance with manufacturer's shop drawings as approved by the architect.
- B. Follow manufacturer's instructions for storage and handling of units before installation.
- C. Do not install boards on damp walls or in damp and humid weather without heat in the building.

- D. Install level and plumb, keeping perimeter trim straight in accordance with manufacturer's recommendations.

### 3.03 ADJUST AND CLEAN

- A. Verify that all accessories are installed as required for each unit.
- B. At completion of work, clean surfaces and trim in accordance with manufacturer's recommendations, leaving all materials ready for use.