

Specifications:

DIVISION 10 - SECTION 10100 - VISUAL DISPLAY BOARDS

PART 1 - GENERAL

- 1.01 DESCRIPTION OF WORK
- A. Section Includes:
 - 1. Porcelain enamel chalkboards
 - 2. Porcelain enamel markerboards
 - 3. Porcelain enamel Marker Walls
 - 4. Tackboards
 - 5. Tack Walls
 - 6. Field-Assembled Trim
 - 7. Vertical and Horizontal Sliding Units
 - B. Related Sections Include:
 - 1. 10410 Directory and Bulletin Boards
 - 2. 11106 Display Equipment
 - 3. 12350 Display Casework
- 1.02 REFERENCED STANDARDS
- A. American Society for Testing Materials
 - 1. ASTM-E 84 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.
- 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 instructions.
- 1.04 QUALITY ASSURANCE
- A. Provide all items in this section as manufactured by: Claridge Products and Equipment, Inc., Harrison, Arkansas 72602-0910, Phone: 870/743-2200 Fax: 870/743-1908
 - B. Regulatory Requirements: Conform to applicable code for flame/smoke rating in tackboards in accordance with ASTM-E 84.
 - C. 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 climatizing area for interior moisture and temperature to approximate normal occupied conditions.
- 1.06 DELIVERY, STORAGE AND HANDLING
- A. Ordering: Comply with manufacturer's ordering instructions and lead time requirements to avoid construction delay.
 - B. Delivery: Deliver materials in original, unopened, undamaged containers with identification labels intact.
 - C. Storage and Protection: Store materials protected from exposure to harmful weather conditions and at temperature 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 Vitracite chalkboards and LCS markerboards 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 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.
1. Contact: P. O. Box 910, Harrison, AR 72602;
Telephone: (870) 743-2200; Fax: (870) 743-1908;
E-Mail: claridge@claridgeproducts.com;
web site: www.claridgeproducts.com.

2.02 MATERIALS

- A. Claridge Porcelain Enamel Chalkboards and Markerboards: Porcelain enamel Vitracite chalkboards and LCS markerboards shall be manufactured in accordance with Porcelain Enamel Institute's specification. Porcelain enamel finish shall be fusion bonded to a 24 gauge steel substrate at lowest possible temperature to reduce steel and porcelain stresses and achieve superior enamel bond and hardness.
1. Claridge Unframed Porcelain Enamel Chalkboards and Markerboards
 - a. Face Sheet: (Specify 24 gauge Vitracite Chalkboard; or 24 gauge LCS Markerboard).
 - b. Core Material: (Specify 1/4" Hardboard; 7/16" MDF; 7/16" Duracore; 3/8" Duracore; 3/8" Honeycomb; 3/8" Particle Board).
 - c. Panel Backing: (Specify 0.002" Aluminum Foil Panel; 0.005" Aluminum Foil Panel; 0.015" Aluminum Sheet Panel; Steel Panel).
 - d. Laminations: Shall be hot-type neoprene contact adhesive applied to both surfaces automatically. Each substrate shall have a minimum of 80% covering with 1.5-2.0 dry mils of adhesive. Panel components shall have uniform pressure applied mechanically over entire area. Laminations shall be made by face sheet manufacturer.
 - e. Size: (Specify size or As indicated on Drawings.).
 - f. Color: (Specify face sheet color from manufacturer's standard colors.).
 2. Claridge Factory-Built Chalkboards and Markerboards:
 - a. Face Sheet: (Specify 24 gauge Vitracite Chalkboard; or 24 gauge LCS Markerboard).
 - b. Core Material: (Specify 7/16" MDF; 7/16" Duracore; 3/8" Duracore; 3/8" Particle Board).
 - c. Panel Backing: (Specify 0.002" Aluminum Foil Panel; 0.005" Aluminum Foil Panel; 0.015" Aluminum Sheet Panel; Steel Panel).
 - d. Series: (Specify Series 1, 3, 4, 5, 8, 9 or 185.).
 - e. Typical Arrangement: (Specify Type A, Type C, Type D, Type F, Type H, Type BR, reverse BL, Type ER, reverse EL, or Type GR, reverse GL.).
 - f. Panel Size: (Specify writing surface panel length and height, and, for combination units, tackboard panel length and height.).
 - g. Panel Color: (Specify color(s) from manufacturer's standard colors.). Color charts furnished on request.
 3. Claridge Porcelain Enamel Marker Walls
 - a. Architect to specify 24 gauge Porcelain Enamel Steel Skins with matched butt joints or 24 gauge Porcelain Enamel laminated panels with matched butt joints and steel splines.
 1. LCS24 - 24 gauge Porcelain Enamel Steel Skins
 2. LCS24-217-F - 24 gauge Porcelain Enamel Steel Skins mounted on 7/16" MDF core with .002 aluminum foil backing.
- B. Tackboards
1. Claridge Unframed Tackboards

- a. Claridge Cork: Composed of 1/4" thick self-healing, burlap backed cork laminated to a 1/4" hardboard backing.
 - b. Fabricork: Vinyl fabric on cork underlay with 1/4" hardboard back.
 - c. Hook-Fab: Nylon fabric on cork underlay with 1/4" hardboard back.
 - d. Designer Fabric: Fabric on cork underlay with 1/4" hardboard back.
 - e. Tan Nucork: Composed of pure grain natural cork on 1/4" hardboard back.
2. Claridge Factory Built Tackboards:
- a. Tackboard Surface: (Specify Claridge Cork: 1/4" thick cork laminated to a 1/4" hardboard backing; Fabricork: Vinyl fabric on cork underlay with 1/4" hardboard back or Vinyl fabric on duracore; Hook-Fab: Nylon fabric on cork underlay with 1/4" hardboard back; Designer Fabric: Fabric on cork underlay with 1/4" hardboard back; or Tan Nucork: 1/4" natural cork on 1/4" hardboard back.
 - b. Series: (Specify Series 1, 3, 4, 5, 8, 9 or 185.).
 - c. Typical Arrangement: (Specify Type CO, Type C, Type D, Type F, Type H, Type BR, reverse BL, Type ER, reverse EL, or Type GR, reverse GL.).
 - d. Panel Size: (Specify tackboard panel length and height, and, for combination units, writing surface panel length and height.).
 - e. Panel Color: (Specify color(s) from manufacturer's standard colors.). Color charts furnished on request.
3. Claridge Tack Walls
- a. Architect to specify edge-wrapped panels of Fabricork (1380AEW) or Designer Fabric (3104EW) butted together, or panels of Fabricork (1380A) or Designer Fabric (3104) installed with fabric-covered trim.
 - 1. 1380AEW Fabricork - vinyl fabric on duracore backing with edges wrapped
 - 2. 1380A Fabricork - vinyl fabric on duracore backing
 - 3. 3104EW Designer Fabric - fabric on duracore backing with edges wrapped
 - 4. 3104 Designer Fabric - fabric on duracore backing
- C. Claridge Extruded Aluminum Trim with Satin Anodize Finish and Accessories
- 1. Factory-Built Trim:
 - a. Series: (Specify Series 1, 3, 4, 5, 8, 9 or 185.).
 - 2. Field-Assembled Trim:
 - a. Screw-On Aluminum Trim
 - b. Slip-On Aluminum Trim
 - c. Snap-On Aluminum Trim
 - d. Marker Wall Trim
 - 1. 1016 Trim with 1015 Ground
 - e. Fabric Covered Tack Wall Trim
 - 1. 1016-FC Fabric Covered Trim with 1015 Ground
 - 2. 697-FC and 698-FC Fabric Covered Outside and Fabric Covered Inside Corner Trim
 - f. Length: (Specify length.).
 - g. Finish: (Specify finish - Satin Anodize standard.).
 - 1. Optional finish - Color Anodized Trim
 - 2. Optional finish - Powder Coat Paint Finished Trim
 - 3. Chalktrough
 - a. Standard continuous, solid type aluminum tray with ribbed section and injection molded end closures.
 - b. Standard continuous, hollow aluminum tray with injection molded end closures; cast aluminum end closures optional.
 - 4. Map Rail
 - a. Standard continuous 1" map rail with cork insert and end stops at the top of each chalkboard or markerboard.
 - b. Standard continuous 2" map rail with cork insert and end stops at the top of each chalkboard or markerboard.
 - 5. Accessories
 - a. Map Hooks: (One map hook furnished for every two feet of Map Rail on Factory-Built Units.).

- b. Roller Brackets: (Specify number required.).
 - c. Flag Holders: (Specify number required.).
- D. Claridge Modular Markerboard, Chalkboard and Tackboard Units:
 1. Typical Arrangement: (Specify MOD1, MOD2 or MOD3)
 2. Writing Surface: (Specify 24 gauge Vitracite chalkboard or 24 gauge LCS markerboard.).
 3. Tackboard Surface: (Specify Claridge Cork, Fabriccork, Hook-Fab, Designer Fabric or Tan Nucork.).
 4. Panel Size: (Specify writing surface panel length and height and/or tackboard panel length and height. 4'0" x 8'0" maximum).
 5. Wall Standards: Specify single or double aluminum wall standards, slotted to receive special modular panel clips. Standards to be fastened directly to wall on 4-foot centers.
 6. Panel Color: (Specify color(s) from manufacturer's standard colors.).
- E. Claridge Factory-Built Wood Framed Markerboard, Chalkboard and Tackboard Units:
 1. Series: (Specify series from manufacturer's standard units.)
 2. Typical Arrangements: (Specify arrangement from manufacturer's standards.).
 3. Panel Size: (Specify panel length and height.).
 4. Panel Color: (Specify color from manufacturer's standard colors.).
 5. Wood Frame: (Specify type of wood and finish from manufacturer's standards.).
- F. Claridge Horizontal Sliding Markerboard, Chalkboard and Tackboard Units:
 1. Series: (Specify series from manufacturer's standard units - two-track; three-track; four-track; or component parts.)
 - a. Sliding Panels and/or Back Panel - Writing surface: 24 gauge steel (Specify 24 gauge steel LCS Markerboard or 24 gauge steel Vitracite Chalkboard)
 - b. Sliding Panels and/or Back Panel - Tackable surface: (Specify Claridge Cork, cork laminated to burlap backing; Fabriccork, vinyl fabric on cork underlay; Designer Fabric, fabric on cork underlay; Hook-Fab, nylon fabric on cork underlay; or Tan Nucork, natural cork, Tackboard)
 2. Sizes: (Specify panel length and height. Standard height - 4 feet. Standard length is up to 24 feet)
 3. Typical Arrangements: (Specify type and color of back panel, if required, and number, type and color of sliding panels. Select from manufacturer's standards.)
 4. Component Parts: (Specify top mounted panels without housing or bottom mounted panels without housing.)
- G. Claridge Vertical Sliding Markerboard, Chalkboard and Tackboard Units:
 1. Series: (Specify series from manufacturer's standard units - manually or motor operated, Wall or Floor Mounted Vertical Sliding Units)
 - a. Sliding Panels and/or Back Panel - Writing Surface: 24 gauge steel (Specify 24 gauge steel LCS Markerboard or 24 gauge steel Vitracite Chalkboard)
 - b. Sliding Panels and/or Back Panel - Tackable Surface: (Specify Claridge Cork, cork laminated to burlap backing; Fabriccork, vinyl fabric on cork underlay; Designer Fabric, fabric on cork underlay; Hook-Fab, nylon fabric on cork underlay; or Tan Nucork, natural cork, Tackboard)
 - c. Sliding Panel(s) and Housing: (Specify number of sliding panels required, one, two or three)
 1. Sliding Panels are 7/8" thick
 2. Housing has 4" wide face
 - a. Housing for units with one sliding panel is approx. 3-5/16" deep
 - b. Housing for units with two sliding panels is approx. 6-1/2" deep
 - c. Housing for units with three sliding panels is approx. 9-9/16" deep
 - d. Sizes: (Specify panel length and height. Standard height is 8 feet for wall mounted verticals and 10 feet for floor mounted verticals. Standard length is up to 16 feet)
 - e. Wall Mounted Units: Panels slide from sill or chalktray to top of unit.
 - f. Floor Mounted Units: Panels slide from floor to top of unit. (Optional kick panel allows sliding panels to be concealed when in down position, leaving entire rear wall surface as writing or tackable surface.)
 2. Series: (Specify series from manufacturer's standard units - Wall or

- Floor Mounted Thinline Vertical Sliding Units.)
- a. Sliding Panels and/or Back Panel: 24 gauge steel (Specify 24 gauge steel LCS Markerboard or 24 gauge steel Vitracite Chalkboard)
 - b. Sliding Panels and/or Back Panel: (Specify Claridge Cork, cork laminated to burlap backing; Fabricork, vinyl fabric on cork underlay; Designer Fabric, fabric on cork underlay; Hook-Fab, nylon fabric on cork underlay; or Tan Nucork, natural cork, Tackboards)
 - c. Sliding Panel(s) and Housing: (Specify number of sliding panels required, one, two or three)
 1. Sliding Panels are 1/2" thick
 2. Housing has 2-5/8" wide face
 - a. Housing for units with one sliding panel is approx. 2-23/32" deep
 - b. Housing for units with two sliding panels is approx. 4-7/8" deep
 - c. Housing for units with three sliding panels is approx. 7" deep
 - d. Sizes: (Specify panel length and height. Standard height is 8 feet for wall mounted Thinline verticals and 10 feet for floor mounted Thinline verticals. Standard length is up to 12 feet)
 - e. Wall Mounted Units: Panels slide from sill or chalktray to top of unit.
 - f. Floor Mounted Units: Panels slide from floor to top of unit. (Optional kick panel allows sliding panels to be concealed when in down position, leaving entire rear wall surface as writing or tackable surface.)
3. Typical Arrangements: (Specify type and color of back panel, if required, and number, type and color of sliding panels. Select from manufacturer's standards.)

2.03

FABRICATION

- A. Shop assembly: (Specify factory assembled or field assembled chalkboard, markerboard, and tackboard units).
- B. Shop assembly: Provide Horizontal Sliding Units with all corners reinforced with angles to strengthen frame. Nylon ball bearing rollers at top of unit and nylon guide rollers at bottom of unit to be of sufficient size and number to eliminate vibration and provide smooth and quiet operation of the panels.
 1. LCS Markerboard:
 - a. Sliding Panels:
 1. Face Sheet: 24 gauge steel
 2. Core: 3/8" honeycomb
 3. Backing: steel
 - b. Back Panels:
 1. Face Sheet: 24 gauge steel
 2. Core: 3/8" particle board
 3. Backing: .002 Foil
 2. Vitracite Chalkboard:
 - a. Sliding Panels:
 1. Face Sheet: 24 gauge steel
 2. Core: 3/8" honeycomb
 3. Backing: steel
 - b. Back Panels:
 1. Face Sheet: 24 gauge steel
 2. Core: 3/8" particle board
 3. Backing: .002 Foil
 3. Claridge Cork Tackboard Sliding Panels and/or Back Panel:
 - a. Face Sheet: 1/4" cork
 - b. Binder: burlap
 - c. Backing: hardboard
- C. Shop assembly: Provide Vertical Sliding Units with all corners reinforced with angles to strengthen unit and eliminate vibration. Panels to be equipped with ball bearing rollers for elimination of side motion and noise plus, ball bearing neoprene end rollers for effortless movement of panels. Sliding panels to be counterbalanced and all cables rotate around one central pulley to eliminate racking. Vertical sliding units to be completely assembled at the factory and erected on a test panel before shipping. All sections to be properly fitted and all units to be thoroughly tested, then taken apart for shipping. Components are to be clearly marked for easy reassembly on the job.
 1. LCS Markerboard:

- a. Sliding Panels:
 - 1. Face Sheet: 24 gauge steel
 - 2. Core: 3/4" honeycomb
 - 3. Backing: steel
 - b. Back Panels:
 - 1. Face Sheet: 24 gauge steel
 - 2. Core: 3/8" particle board
 - 3. Backing: .002 Foil
 - 2. Vitracite Chalkboard:
 - a. Sliding Panels:
 - 1. Face Sheet: 24 gauge steel
 - 2. Core: 3/4" honeycomb
 - 3. Backing: steel
 - b. Back Panels:
 - 1. Face Sheet: 24 gauge steel
 - 2. Core: 3/8" particle board
 - 3. Backing: .002 Foil
 - 3. Claridge Cork Tackboard Sliding Panels and/or Back Panel:
 - a. Face Sheet: 1/4" cork
 - b. Binder: burlap
 - c. Backing: honeycomb and steel
- D. Shop assembly: Provide Thinline Vertical Sliding Units with all corners reinforced with angles to strengthen unit and eliminate vibration. Panels to be equipped with nylon guides for effortless panel movement. Sliding panels to be counterbalanced and all cables rotate around one central pulley to eliminate racking. Thinline Vertical Sliding Units to be completely assembled at the factory and erected on a test panel before shipping. All sections to be properly fitted and all units to be thoroughly tested, then taken apart for shipping. All components are to be clearly marked for easy reassembly on the job.
- 1. LCS Markerboard:
 - a. Sliding Panels:
 - 1. Face Sheet: 24 gauge steel
 - 2. Core: 3/8" honeycomb
 - 3. Backing: steel
 - b. Back Panels:
 - 1. Face Sheet: 24 gauge steel
 - 2. Core: 3/8" particle board
 - 3. Backing: .002 Foil
 - 2. Vitracite Chalkboard:
 - a. Sliding Panels:
 - 1. Face Sheet: 24 gauge steel
 - 2. Core: 3/8" honeycomb
 - 3. Backing: steel
 - b. Back Panels:
 - 1. Face Sheet: 24 gauge steel
 - 2. Core: 3/8" particle board
 - 3. Backing: .002 Foil
 - 3. Claridge Cork Tackboard Sliding Panels and/or Back Panel:
 - a. Face Sheet: 1/4" cork
 - b. Binder: burlap
 - c. Backing: hardboard

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 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. 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.