

VISUAL DISPLAY BOARDS

GENERAL INFORMATION

- 1.1 Factory-assembled enameled steel, whiteboard and tackboard units.
- 1.2 The following standards govern the work of this Section to the extent specified in each citation.
 - a. Aluminum Association (AA) DAF-45 Designation System for Aluminum Finishes, and Standards for Anodized Architectural Aluminum.
 - b. American National Standards Institute (ANSI) A135.4 Basic Hardboard, and A208.1 Mat-Formed Wood Particleboard.
 - c. American Society for Testing and Materials (ASTM) A424 Specification for Sheet Steel for Porcelain Enameling; B221 Specification for Aluminum-Alloy Extruded Bars, Rods, Wires, Shapes, and Tubes; C346 Test for 45-degree Specular Gloss of Ceramic Materials; and E84 Test Method for Surface Burning Characteristics of Building Materials.
 - d. Federal Specifications (FS) S-325 Shield, Expansion, Nail, Expansion, and Nail Drive, Screw (Devices, Anchoring, Masonry); and CCC-W-408 Wall Covering, Vinyl Coated.

DESIGN REQUIREMENTS

- 2.1 Specify Porcelain Enamel Whiteboard Warranty: Manufacturer's warranty agreeing to replace whiteboards that lose their original writing and erasing qualities, or crack, craze, or flake, in normal service, within 50 years following the date of manufacture. Warranty shall name the Owner, purchaser, and date of manufacture. If more than one date is given, the warranty shall identify products to which each date applies.
- 2.2 Materials:
 - a. Enameling Steel Sheet: ASTM A424 x 22-gage, especially processed for high temperature firing.
 - b. Backing Steel Sheet: 24-gage commercial quality steel sheet, treated for corrosion resistance.
 - c. Particleboard: ANSI A208.1 Grade 1-M-1.
 - d. Hardboard: ANSI/AHA 135.4, Tempered, S1S.

- e. Honeycomb Core: Manufacturer's standard plastic or resin-coated paper.
- f. Laminating Adhesive: Manufacturer's standard moisture-resistant thermoplastic adhesive.
- g. Aluminum: ASTM B221 x 6063-T5 extruded aluminum with Architectural Class II, medium matte clear (natural) anodic finish: AA-C22A31 per DAF-45.
- h. Tackboard: Flame retardant vinyl plastic cork.

2.3 Fabrication:

- a. Aluminum: Carefully select finished components for color match in each assembly. Use one-piece-for-length sections up to maximum production sizes. Make joints flush and close-fitting.
- b. Visual Display Surfaces: Specify that faces be made in one piece up to maximum production sizes that meet shipping and field conditions, and that necessary joints be located symmetrically; joints shall be splined, flush and tight-fitting. Face joints shall be precision-cut, ground, and sharp edges shall be eased in porcelain enameled work. Finish edges as specified for faces.
- c. Whiteboard Face Sheets: Specify that enameling steel be coated with a primer of 0.0025" (min.) thick nickel cobalt ground coat. Face shall be coated with 0.0025" (min.) thick vitreous porcelain writing surface. Specify that the reverse side of the steel base sheet receive a ground coat of .0005" and a spray coat of silica to improve lamination adhesion.
- d. The panel edges at butt joints shall be porcelain enamel. Fuse cover and ground coats to the steel at the manufacturer's standard firing temperature, but not less than 1250°F.

2.4 Writing Surface: Selected standard color (typically white) and uniform matte finish with 15% to 20% reflectance per ASTM C346.

- a. Laminating: Panels shall be laminated under high pressure with adhesive. Obtain at least 80% adhesive coverage @ 1.5 to 2.0 DMT.
- b. Whiteboard Panels: Laminate face sheets and backing sheets to 1/2" thick particleboard core.
- c. Tackboard Panels: Laminate tacking surfaces to 1/4" hardboard backing.

2.5 Aluminum Trim: Screw-fasten to panel backs. Three-sided frame with rectangular face and back fastening flange; matching mullions.

CONSTRUCTION REQUIREMENTS

- 3.1 Examine Project for conditions that affect work. Do not begin installation until unsatisfactory conditions are corrected. Beginning installation implies acceptance of conditions. Defects caused by unsatisfactory conditions or untimely installation shall be corrected at no cost to the Owner.
- 3.2 Installation:
- a. Install work per manufacturer's instructions. Keep perimeter lines straight, plumb, and level. Make exposed field joints flush and tight; use splicers to maintain alignment.
 - b. Furnish and install grounds, clips, backing materials, brackets, anchors, and accessories necessary to complete installation.
 - c. Anchorage to Drywall: Anchor work to metal framing members and metal anchor plates with tapping sheet metal screws/toggle bolts. Anchor work to unreinforced drywall panels with toggle bolts; limit loads on unreinforced panels to 20 pounds pullout and 40 pounds shear.
 - d. Anchorage to Concrete/Masonry: Anchor work with sleeve anchors or other approved devices.
- 3.3 Adjusting, Cleaning, and Protection
- a. Correct nonconforming and damaged work. Replace work that cannot be corrected at the Project.
 - b. Cleaning: Remove fingerprints and other soil periodically during handling and installation. Do not let soil accumulate until final cleaning. At completion, clean all surfaces with water and mild soap or detergent. Rinse thoroughly and dry the surfaces.
 - c. Protection: Protect work from damage and abuse.

REFERENCE

- 4.1 The applicable CSI Specification Section is 10 11 00.