

**SPECIFICATION
FOR
MARKERBOARDS, TACKBOARDS AND ACCESSORIES**

(This specification is released for procurement purposes until revised or rescinded.)

SCOPE

This specification covers wall mounted markerboards, with porcelain enamel writing surfaces and tackboards suitable for use by state agencies, institutions, and public schools. The marker boards are intended for use with liquid dry erase markers.

I. CLASSIFICATION

TYPE I - MARKERBOARD PREFRAMED FOR WALL MOUNTING, SIZES: 4'X4', 4'X6', 4'X8', 4'X10', 4'X12'.

- A. 1/2" Thick With a 28 Gauge Porcelain Enamel Surface Laminated to a MDF Substrate With An Aluminum Frame
- B. 1/2" Thick With a 24 Gauge Porcelain Enamel Surface Laminated to a MDF Substrate With An Aluminum Frame

TYPE II - MARKERBOARD WITH NO FRAME, SIZES: 4'X8', 4'X10', or 4'X12'.

- A. 1/2" Thick With a 28 Gauge Porcelain Enamel Surface Laminated to a MDF Substrate With An Aluminum Backing
- B. 1/2" Thick With a 24 Gauge Porcelain Enamel Surface Laminated to a MDF Substrate With An Aluminum Backing

TYPE III - PREFRAMED TACKBOARD

- A. 1/8" Natural Cork Laminated to 3/8" Fiberboard
- B. 1/4" Natural Cork Laminated to 1/4" Medium Density Fiberboard

TYPE IV - MARKERBOARD ACCESSORIES

- A. Markerboard Markers – Non-Permanent Liquid Dry Erase Chalk.
- B. Markerboard Erasers – For Use With Non-Permanent Dry Erase Markers.
- C. Markerboard Cleaner – For Use With Non-Permanent Dry Erase Markers.

II. APPLICABLE STANDARDS

The following documents of issue in effect on the date of the Invitation For Bids shall form a part of this specification.

PEI-1002 Manual and Performance Specifications for Porcelain Enamel Writing Surfaces

PORCELAIN ENAMEL INSTITUTE, INC.

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III. REQUIREMENTS

A. MARKERBOARDS

1. PORCELAIN, FELT TIP MARKERBOARD (LIQUID CHALK, LCS) WRITING SURFACE

Porcelain enamel writing surfaces are laminated to 7/16" thick MDF with a minimum density of 45 lbs/cu ft. Enamel surface shall be applied over minimum 24 or 28-gauge enameling grade steel or 24 or 28 gauge enameling grade aluminized steel, as specified in the solicitation for bids. Aluminum moisture resistant backing, minimum 0.005 inch thick shall be applied to all laminated porcelain enamel boards. All porcelain enamel writing surfaces shall comply with the description and requirements of the Porcelain Enamel Institute's PEI-1002 Manual and Performance Specifications for Porcelain Enamel Writing Surfaces. Cross-section of extruded aluminum trim members, (frames, map rails, side jam trim, chalk trays, etc.), shall be a minimum 1/16" (0.062). The writing surface shall be appropriate for use of the liquid chalk, or liquid dry erase marking pens, and allows consistent smooth lines. Erases easily with a dry cloth or standard chalk eraser, retains no residue, or "ghost writing" after cleaning with water or dry erase cleaners. Surface shall be smooth, not dimpled "orange peel" and shall not be affected by most strong cleaners and non-staining due to non-porous surface.

2. ALUMINUM FRAME FOR WALL MOUNTED BOARDS

The frame shall be anodized extruded aluminum minimum 3/4" wide at face by a minimum 5/8" deep to enclose the 1/2" thick board on all four sides. The bottom member may be the same as other sides with chalk/eraser trough attached separately or it may be integral with the trough. A map rail if requested, is a minimum 1/4"x1" with plastic impregnated color forbo type cork and includes two map hooks. Map rail shall be attached to the top member of the frame. Brackets suitable for securely mounting the board shall be furnished. Cross section of extruded aluminum trim members shall be a minimum of 1/16" (0.062). Frame is tightly and securely attached to the board without open channels or sharp edges.

3. ALUMINUM MARKER/ERASER TROUGH

The marker and eraser trough shall be anodized extruded aluminum of 1/16" thick cross section and may be integral with the bottom frame member or may attach to the frame. May provided with a minimum 2-1/4" wide trough blade or box style trough as specified in the solicitation for bids. The blade style tray shall be a minimum 1/4" deep and with smooth 3/4 inch radius rounded ends or securely attached rounded protective end caps. The box style trough shall be continuous with slanted front aluminum end enclosures to prevent a projecting edge along length or at ends. Includes formed ribs or protrusions above the lower surface to hold the eraser and markers.

4. COLORS

Colors of writing surfaces shall be the manufacturer's standard white, light gray or beige. Gloss white shall be furnished unless otherwise specified on the Invitation For Bids or purchase order.

B. TACKBOARDS

1. FRAMES

The frame shall be anodized extruded aluminum minimum 3/4" wide at face by a minimum 5/8" deep for 1/2" thick boards. Clips for hanging boards shall be provided.

2. CORK

Provide as specified in the Invitation For Bids.

Natural Type: Fine grain composition cork shall be uniform fine grain, to be provided in the thickness specified. Flexible and free of surface irregularities. Either 1/8" or 1/4" thick as specified in the Invitation For Bids.

3. BACKING BOARDS

Backing boards for 1/8" thick cork shall be minimum 3/8" thick fiberboard, and for 1/4" thick cork shall be minimum 1/4" thick medium density fiberboard (MDF) for up to 12 foot in length. All other boards shall be of hardboard, fiberboard, or particleboard of the thickness required to provide the finished thickness specified.

4. LAMINATION

All laminations of mounted boards shall be done under pressure with a suitable adhesive providing a durable and permanently bonded unit.

5. WORKMANSHIP

All markerboards and tackboards shall demonstrate good workmanship and there shall be no sharp corners or edges that would cause injury to persons or damage to clothing.

C. HARDWARE - GENERAL

1. ATTACHMENT CLIPS

All framed markerboards and tackboards shall be provided with aluminum or galvanized steel attachment clips approximately 2-1/2" long by 1" wide suitable for securing frames or boards securely to walls. Clip shall include holes and guides for attachment to perimeter trim and wall. One (1) #12 x 1-3/4" screw with 1/4" plastic plug and one (1) #8 x 1/2" screws shall be provided for each 16" of board for attachment to walls.

2. ADHESIVE

Unframed markerboards are to be installed with resin based mastic/adhesive. Mastic/adhesive shall provide permanent bond and be available in either a one (1) gallon pail, five (5) gallon pail or 29 oz. caulk gun style tubes. Mastic/adhesive provided shall provide sufficient strength to permanently secure the markerboard or tackboard.

D. INSTALLATION - GENERAL INSTRUCTIONS

Boards should be installed as soon as possible upon delivery using proper hardware and adhesive herein specified. Boards should not be installed on walls with high moisture content, salt, or unusual ph levels; or walls that are unsealed. Additional mastic, and mechanical fasteners, etc., should be used whenever abnormal climatic or atmospheric conditions are present that may effect securement.

E. STORAGE - GENERAL INSTRUCTIONS

If boards cannot be installed immediately after delivery, they should be stored in temperature, humidity controlled environment.

Board should be stacked back-to-back, front-to-front, with a protective material between boards (cork, cardboard, etc.).

Boards should be stacked vertically, braced, & standing on a dry surface.

TYPE V - MARKERBOARD ACCESSORIES

A. MARKERS -

Markers write smoothly with consistent smooth lines, without a squeak on whiteboards, porcelain enamel, melamine, glass and most other dry erase surfaces. Inks are quick drying and wipe off easily with a dry cloth or eraser. Dry-erase ink is certified nontoxic, and safe with contact to skin.

B. ERASERS -

Specifically designed for use on markerboards with a fibrous surface remove even stubborn master ink particles. Overall dimensions are 5"L x 2"H x 1" thick. Washable with soap and water.

C. CLEANER -

Nonflammable white board cleaner cleans shadows, ghosting, stains and permanent ink from most porcelain boards. Available in spray pump bottle or wet wipes. Conforms to the ASTM D4236.

IV. WARRANTY

The contractor warrants to the owner that all markerboards, tackboards and accessories furnished under this specification will be new and of good material and workmanship and agrees to promptly replace any markerboard, or tackboard, or frame parts which by reason of defective material or workmanship shall fail under normal use, free of negligence or accident for a period of one year from date of acceptance. Such replacement shall include all parts, labor, and transportation free of any charge to the owner or his representative.

Porcelain enameled steel markerboards shall be guaranteed that the writing surface shall maintain its original writing and erasing qualities (not become slick and shiny) without delaminating from the mounting board for 50 years from the date of original installation.

V. SERVICE PARTS AND MANUALS

The contractor shall furnish with each order a set of specific installation & storage instructions including proper unloading of boards, cleaning and maintaining the writing surface of markerboards.

VI. ACCEPTANCE EVALUATION AND QUALITY ASSURANCE

All markerboards shall comply with the description and terminology described in the PEI-1002 Manual and Performance Specifications for Porcelain Enamel Writing Surfaces.

An acceptance inspection for compliance with this specification may be called for by the owner.

VII. DELIVERY AND PAYMENT

Delivery and payment for equipment furnished under this specification shall be in accordance with the terms and conditions stated in the Invitation For Bids. The contractor shall be responsible for any packing, packaging, or protection required to ensure delivery in an undamaged condition.

VIII. ORDERING DATA

1. Title, number, and date of this specification.
2. Type and style (framed or unframed) for markerboard required.
3. Size and thickness (24 or 28 AWG) of Porcelain Enamel Surface.
4. Color of writing surface (default gloss white) and map rail of the markerboard.
5. Type and style (cork thickness) of framed tackboard required.
6. Board size of tackboard required.
7. Markerboard markers, erasers, and cleaner – color if applicable.

END OF SPECIFICATION