

SECTION 10 11 00

VISUAL DISPLAY BOARDS

PART 1: GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings, Details of Construction and general provisions of Contract, including General and Supplementary Conditions and Division-1 Specification Sections, apply to work specified in this section.

1.02 SUMMARY

- A. Section includes:
1. Markerboards
 2. Tackboards
 3. Map rails
- B. Related work specified in other sections:
1. Wood blocking - Section 06 10 53.

1.03 SUBMITTALS

- A. Shop Drawings: Submitted for approval by Architect, prior to fabrication. Indicate installation details, materials used, quantity, location and size required.
- B. Samples: Submitted for approval by Architect, prior to fabrication.
1. Size 3" x 5", color as specified.
 - a. Sample of writing surface.
 - b. Sample of tackable surface.
 2. Trim samples 6" long.
 - a. Perimeter trim.
 - b. Chalk tray.
 - c. Map rail.
- C. Manufacturer's installation instructions.
- D. Sample warranty.
- E. Installer Qualifications: Acceptable to manufacturer.
- F. Cleaning Instructions: Provide information in O & M manual Section 01 78 23 on recommended writing utensils and cleaning materials and procedures.

1.04 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver products after the building has been enclosed and interior air and substrate temperatures are stable and approximate to final conditions.
- B. Store units vertically with packing materials between each unit and in dry areas at temperatures above 55 degrees F.

1.05 QUALITY ASSURANCE

- A. Surface-Burning Characteristics: As determined by testing identical products according to ASTM E 84 by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.

1. Class B:

- a. Flame-Spread Index: 26-75.
- b. Smoke-Developed Index: 0-450.

1.06 JOB CONDITIONS

- A. Do not install visual display surfaces until spaces are enclosed and weather tight, surfaces are complete and dry, work above ceilings is complete, and temporary or permanent HVAC system is operating and maintaining ambient temperature and humidity conditions at occupancy levels during the remainder of the construction period.
- B. Field Measurements: Verify actual dimensions of construction contiguous with visual display surfaces by field measurements before fabrication.

1.07 WARRANTY

- A. Manufacturer's standard form for markerboard surfaces in which manufacturer agrees to repair or replace markerboard face sheets that fail in materials or workmanship within specified warranty period. Submit per Section 01 78 23.

1. Failures include, but are not limited to, the following:
- a. Surfaces lose original writing and erasing qualities.
 - b. Surfaces exhibit crazing, cracking or flaking.

2. Warranty Period: Life of building.

PART 2: PRODUCTS

2.01 MANUFACTURERS

- A. Manufacturer of markerboard face sheet is specified as Polyvision. Equivalent products by Claridge Products are acceptable.
- B. Manufacturers/fabricators of visual display board systems shall conform to these specifications.

2.02 MARKERBOARDS

- A. Writing Surface Face Sheet:

- 1. Shall be e³ environmental ceramic steel surface consisting of enameling grade cold rolled steel manufactured from a minimum of 30 percent post-consumer and post-industrial waste, .016" (28 gauge) thick for all preframed boards without joints. All face sheets shall be .025" (24 gauge) thick for boards with spline joints and have the same content as .016" (28 gauge) thick face sheets.
- 2. All enameling grade steel shall be coated with a coating process that exhibit the following characteristics:
 - a. All coatings shall contain less than a combined total of less than 0.1 percent of heavy metal cadmium, mercury, hexavalent chromium, and lead.
 - b. All coatings shall be free of arsenic and antimony as well as volatile organic compounds.
 - c. Writing surface face sheet shall be 99 percent recyclable.
 - d. 91 to 97 percent gloss (high gloss surface) and free of orange peel.

e. Facing sheet coatings:

- 1) 1.7-2.5 mils enameled ground coat on face minimum thickness.
- 2) 3.0-4.0 mils enameled cover (color) coat for markerboard.
- 3) 1.7-2.5 mils enameled minimum ground coat on back of facing.
- 4) Firing temperatures shall be 1475-1500 degrees minimum.

3. Color and Gloss: See Material Finish/Color Schedule, on Architectural Drawings.

B. Writing Surface Core:

1. ½" thick particleboard with no urea formaldehyde added. (Maximum panel width is 16'-0"). All joints/seams shall be equipped with continuous steel splines routed into the particleboard core to assure alignment of writing surfaces joined in the same plane. Gypsum board core is also acceptable.

C. Aluminum moisture backer shall be .005" thick, and shall be factory laminated to core material.

D. Lamination:

1. Factory machine type only.
2. Specifically formulated environmentally friendly adhesives containing no volatile organic compounds.

2.03 TACKBOARDS

A. Core: ¼ inch fiberboard.

B. Covering: ¼ inch linoleum resilient homogeneous tackable surface of natural materials. Surface shall be washable, self-healing, and resistant to bacteria.

1. Color: See Material Finish/Color Schedule, on Architectural Drawings.

C. Lamination:

1. Factory machine type only.
2. Specifically formulated environmentally friendly adhesives containing no volatile organic compounds.

2.04 TRIM

A. Type 6063 alloy grade aluminum with T5 tempering treatment and shall receive type 2010R1 anodized finish. Trim shall be free of raw or ground edges, and untreated or uncoated edges. Trim must be 99 percent recyclable. No exposed fasteners.

1. Color: See Material Finish/Color Schedule, on Architectural Drawings.

1. Perimeter trim (except top of boards) shall be minimum .062" thick, ± 1/2" narrow profile, securely fastened with resin coated staples at the rear of the unit. Top trim shall be combination perimeter trim and 1" map rail with cork inserts. Trim shall be supplied with corners mitered to a hairline joint.

2. Markerboard Tray: Full width, blade tray, 2 ¾"

3. Map Rail: 1-inch full width cork map rail.

4. Accessories:

- a. 1-inch metal map hook (two per each 4 foot of markerboard length).
- b. Removeable Chalktray: 12" long magnetic, satin anodized aluminum (Provide on boards without permanent chalktrays and as shown on drawings).

5. Attachment devices:

- a. Adjustable slotted wall brackets (zinc plated).
- b. Attachment screws (for bracket attachment to boards).
- c. Adhesive: As recommended by manufacturer for temporary support of markerboards and tackboards.

B. Adhesive: As recommended by manufacturer for temporary support of markerboards and tackboards.

C. Anchors: As recommended by markerboard and tackboard manufacturer.

PART 3: EXECUTION

3.01 INSPECTION

- A. Prior to installation, inspect supporting construction and grounds to assure reinforcement is sufficient for installation of markerboards.
- B. Check surface conditions to assure they are:
 - 1. Free from dust dirt or scaling paint.
 - 2. Free from projections or depressions that affect smooth finished surfaces of markerboard.
- C. Verify that surface to receive trim is true and even to allow trim member to lie flat.
- D. Do not proceed with installation until deficiencies are corrected.

3.02 INSTALLATION

- A. Keep perimeter lines straight, plumb, and level, and in plane of wall.
- B. Form straight joints, balanced symmetrically, joints in markerboard and tackboard surface are not acceptable.
- C. Fit markerboard accurately and neatly around projections and outlet boxes.
- D. Fit aluminum frames to precise hairline joints with no rough edges.
- E. Secure boards to wall with adhesive and anchors appropriate for material boards are being installed on.
- F. Locate accessories on each board as specified.

3.03 CLEANING

- A. Clean units to original finish.
- B. Replace damaged and stained units that cannot be cleaned, at no additional cost to Owner.

END OF SECTION 10 11 00

SECTION 10 21 13

SOLID PLASTIC TOILET PARTITIONS

PART 1: GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings, Details of Construction and general provisions of Contract, including General and Supplementary Conditions and Division-1 Specification Sections, apply to work specified in this section.

1.02 SUMMARY

- A. Section includes: Provide and install toilet partitions and urinal screens as indicated on drawings.
- B. Related work specified in other sections:
1. Toilet accessories (except combination coat hook-bumpers, purse shelf) - Section 10 28 13.

1.03 SUBMITTALS

- A. Submittal Procedures:
1. Product data for compartments, panels, finishes, hardware, and accessories.
 2. Shop drawings, showing partition plans, elevations, field verified, dimensions, door swings, details for supports, and method of anchorage.
 3. Samples of manufacturer's colors/finishes.
 4. Installation instructions.
 5. Submit the following per Section 01 78 23.
 - a. Maintenance instructions.
 - b. Copy of warranty.

1.04 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Deliver compartments in suitable crating or packaging to prevent damage in transit and storage.
- B. Coordinate delivery to reduce period of on-site storage. Store under cover in a dry area.

1.06 QUALITY ASSURANCE

- A. Surface-Burning Characteristics: As determined by testing identical products according to ASTM E 84, or another standard acceptable to authorities having jurisdiction, by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
1. Flame-Spread Index: 200 or less.
 2. Smoke-Developed Index: 450 or less.
- B. Regulatory Requirements: Comply with applicable provisions in Americans with Disabilities Act (ADA) and local Building Code.

1.07 WARRANTY

- A. Provide 15 year warranty to cover panels, doors, and pilasters against breakage, delamination, and corrosion. Submit per Section 01 78 23.

PART 2: PRODUCTS

2.01 POLYMER RESIN PARTITIONS

- A. Products produced by General Partitions Mfg. Corp. are specified. Other manufacturers with products that conform to requirements of specification are acceptable.

1. Construction

- a. Toilet Partition Type: Floor mounted overhead braced "Series 40". Panel height between 55"-60".
- b. Doors: 24" wide x 58" high unless noted otherwise. Accessible stall doors shall have minimum clear width of 32" x 58" high.
- c. Urinal Screens: Wall mounted. 18" x 42" - 55".
- d. Finish: Uniform color throughout. Color: See Material Finish/Color Schedule, on Architectural Drawings.
- e. Accessories: Purse shelf (for each female stall), combination coat hook and bumper (for all stalls).
- f. Hardware: Include gravity style self closing continuous hinge and bracket assemblies, steel bar saddle for attachment to floor or ceiling with threaded steel studs and leveling studs, pilaster shoes, aluminum anti-grip headrail on panels, door latches with emergency access, door handles, door strikes and keepers. Provide continuous anchor strip to attach panels to walls. Finish: Aluminum or stainless steel.
- g. Fasteners: Stainless steel. Provide theft-proof head thru-bolt sex bolt fasteners at hinge brackets, keeper and strike with rubber bumper.

2. Panels

- a. Material: Molded under pressure from high density polymer resin in uniform color throughout.
 - 1) Resistant to delamination, water, steam, corrosion, soaps, detergents, and mildew. Does not absorb odors.
 - 2) Self-lubricating surface that is graffiti resistant to markings from pen, pencil, marker, and paint.
 - 3) Edges: Machine radius eliminating sharp edges.
 - 4) Surface texture: Orange peel.
- b. Heat sinks: Attach anti-grip handrail to bottom edges of panels and doors to protect panel from being ignited by vandals.
- c. Nominal Thickness:
 - 1) Panels: 1 inch.
 - 2) Doors: 1 inch.
 - 3) Pilasters: 1 inch.

B. Miscellaneous Construction

1. Provide factory cut-outs and reinforcing for grab bars and accessories in partitions as required.
2. Meet Building Code requirements for handicapped access.

PART 3: EXECUTION

3.01 PREPARATION

- A. Coordinate requirements for blocking in stud walls to ensure proper support is provided for wall attachments.
- B. Verify that site conditions are ready to receive work and opening dimensions are as indicated on shop drawings.
- C. Verify correct spacing of plumbing fixtures.

3.02 INSTALLATION

- A. Install partitions secure, plumb, and level in accordance with manufacturer's instructions.
- B. Maintain 3/8 to 1 inch uniform space between wall and panels and between wall and end pilasters.
- C. Attach continuous panel brackets securely to walls using tamper proof anchor devices recommended by manufacturer.
- D. Where indicated on approved shop drawings, pilasters intersecting adjacent walls shall be terminate 12 inches above floor and attach to wall with continuous brackets.
- E. Where indicated on approved shop drawings, pilasters intersecting adjacent walls shall be attached with continuous brackets.
- F. Attach panels and pilasters to brackets with tamper-proof sheet metal screws.
- G. Brace pilasters with overhead rail. Locate headrail joints at pilaster center lines.
- H. Anchor pilaster to floor with stainless steel angle plate, sheet metal screws, and anchors. Conceal floor fastenings with pilaster shoes.
- I. Anchor urinal screen panels to walls with continuous aluminum channel.
- J. Door installation: Hang doors from pilasters. Equip each door with full length continuous hinge, door latch, door strike and keeper, and coat hook and bumper. Install door pull on out swinging doors.

3.03 ERECTION TOLERANCES

- A. Maximum variation from true position: 1/4 inch.
- B. Maximum variation from plumb: 1/8 inch.

3.04 ADJUSTING

- A. Replace significantly damaged, bent, deeply scratched, or dented panels.
- B. Adjust hinges to locate inswinging doors in partial open position and out swinging doors in closed position when unlatched.
- C. Adjust and align hardware to uniform clearance at vertical edge of doors.

3.05 CLEANING

- A. Clean surfaces with liquid spray furniture or counter top polish. Do not use abrasives.

3.06 DEMONSTRATION

- A. Engage factory-authorized representative to train Owner's maintenance personnel on cleaning procedures and damage repair. Refer to Section 01 79 00 Demonstration and Training.

END OF SECTION 10 21 13

SECTION 10 51 13

LOCKERS

PART 1: GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings, Details of Construction and general provisions of Contract, including General and Supplementary Conditions and Division-1 Specification Sections, apply to work specified in this section.

1.02 SUMMARY

- A. Section includes:

1. Installation of "Owner provided" athletic lockers on existing concrete base, as shown on Drawings.
2. New boxed end and slope top panels for relocated athletic lockers as shown on Drawings.

1.03 SUBMITTALS

- A. Shop Drawings: Submitted for approval by Architect, prior to fabrication. Indicate installation details, materials used, quantity and size required, colors. Refer to Submittals Section for submittal requirements.
- B. Samples: Submitted for approval by Architect, prior to fabrication. Indicate locker body, door colors.

1.04 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Deliver, store and handle panels to prevent damage.

PART 2: PRODUCTS

2.01 LOCKERS END PANELS SLOPE TOPS

- A. Boxed End Panels: 16 gauge high-grade cold rolled sheet steel.
- B. Sloped Top Panels:
 1. Continuous Slope Tops: 20 gauge high-grade cold rolled sheet steel offered in six foot sections including 16 gauge end caps and rear supports as well as 20 gauge splice plates.
 2. Slope Top End Caps: All end caps will be constructed of 16 gauge material that is flanged on all three sides. These flanges are to be formed to a dimension of 11/16 inch for ease of mounting and securing of the part to the locker unit. One right hand end cap and one left hand end cap will be provided for each run of lockers.
 3. Slope Top Joint Caps: Slope top joint caps to be constructed of two pieces of 22 gauge sheet steel formed and firmly spot welded together providing a snug fitting joint between sections of slope top panels.
 4. Rear Supports: Adjustable height rear supports constructed of 16 gauge material will be provided to support the slope top panels at 36 inch intervals. These supports are designed to provide strength and support throughout the length of the locker run.
- C. Color: polyester powder coat paint to match existing locker color.

PART 3: EXECUTION

3.01 INSPECTION

- A. Field verify dimensions of existing lockers at locations of new end and slope top panels.

3.02 INSTALLATION

- A. Install in accordance with manufacturer's instructions.

3.03 CLEANING

- A. Wipe locker surfaces to remove fingerprints, smudges.
- B. Clean adjacent surfaces soiled by this work.
- C. Replace adjacent surfaces damaged by this work.

END OF SECTION 10 51 13