SECTION 10101

VISUAL DISPLAY SURFACES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.02 SUMMARY

A. This Section includes the following:
   1. Markerboards.
   2. Tackboards.

B. Related Sections include the following:
   1. Division 6 Section "Rough Carpentry" for concealed wood blocking required for installation of boards.

1.03 DEFINITIONS

A. Visual Display Boards: Markerboards and tackboards.

1.04 SUBMITTALS

A. General: Submit in accordance with Section 01300.

B. Product Data: For each type of product indicated. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.

C. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work.
   1. Show location of panel joints.
   2. Show location of special-purpose graphics for visual display surfaces.
   3. Include sections of typical trim members.

D. Maintenance Data: For visual display surfaces to include in maintenance manuals.
   1. Include precautions for cleaning materials and methods that could be detrimental to surfaces.

1.05 QUALITY ASSURANCE

A. Source Limitations: Obtain each type of visual display surface through one source from a single manufacturer.
   1. Markerboards and tackboards shall be manufactured by same manufacturer.

B. Fire-Test-Response Characteristics: Provide fabrics with the surface-burning characteristics indicated, as determined by testing identical products per ASTM E 84 by UL or another testing and inspecting agency acceptable to authorities having jurisdiction. Identify materials with appropriate markings of applicable testing and inspecting agency.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Deliver factory-built visual display boards, including factory-applied trim, completely assembled in one piece without joints, where possible. If dimensions exceed maximum manufactured panel size, provide two or more pieces of equal length as acceptable to Architect. When overall dimensions require delivery in separate units, prefit components at the factory, disassemble for delivery, and make final joints at the site.

B. Store visual display units vertically with packing materials between each unit.

1.07 PROJECT CONDITIONS

A. Field Measurements: Verify dimensions by field measurements before fabrication and indicate measurements on Shop Drawings.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

A. In other Part 2 articles where titles below introduce lists, the following requirements apply to product selection:
1. Product: Subject to compliance with requirements, provide product specified.
2. Manufacturers: Subject to compliance with requirements, provide products by one of the manufacturers specified.

2.02 MATERIALS, GENERAL

A. Porcelain-Enamel Face Sheet: Porcelain-enamel-clad, ASTM A 463/A 463M, Type 1, stretcher-leveled aluminized steel, with 0.0236-inch (0.60-mm) uncoated thickness; with porcelain-enamel coating fused to steel at approximately 1000 deg F (538 deg C).
1. Gloss Finish: Low gloss; dry-erase markers wipe clean with dry cloth or standard eraser. Suitable for use as projection screen.

B. Hardboard: AHA A135.4, tempered.

C. Particleboard: ANSI A208.1, Grade 1-M-1.

D. Fiberboard: ANSI A208.2, Grade MD.

E. Cork Sheet: MS MIL-C-15116-C, Type II.

F. Natural Cork Sheet: Seamless, single layer, compressed fine-grain cork sheet, bulletin board quality; face sanded for natural finish.

G. Extruded Aluminum: ASTM B 221 (ASTM B 221M), Alloy 6063.

2.03 MARKERBOARDS

A. Porcelain-Enamel Markerboard: Balanced, high-pressure, factory-laminated markerboard assembly of 3-ply construction consisting of backing sheet, core material, and 0.024-inch- (0.6-mm-)thick (24 gage), porcelain-enamel face sheet with low-gloss finish.
1. Manufacturers:
a. Claridge Products & Equipment, Inc.
b. PolyVision Corporation.
2. Particleboard Core: 3/8 inch (9.5 mm) thick; with 0.005-inch- (0.127-mm-) thick, aluminum foil backing.
3. Laminating Adhesive: Manufacturer's standard moisture-resistant thermoplastic type.

4. Accessories: Clear anodized, extruded aluminum trim and chalk trough, and full length one inch wide map rail with cork insert with two metal map hooks for every six feet of marker board.
5. Sizes: As indicated.
6. Color: As selected by Architect.

2.04 TACKBOARDS

A. Manufacturers:
1. Claridge Products & Equipment, Inc.
2. PolyVision Corporation.

B. Natural-Cork Tack Board: 1/4-inch- (6-mm-) thick, natural cork sheet factory laminated to 1/4-inch- (6-mm-) thick hardboard or plywood backing.

C. Frame: Clear anodized, extruded aluminum trim to match marker boards.

2.05 MARKERBOARD AND TACKBOARD ACCESSORIES

A. Aluminum Frames and Trim: Fabricated from not less than 0.062-inch- (1.57-mm-) thick, extruded aluminum; of size and shape indicated.
1. Factory-Applied Trim: Manufacturer's standard with no visible screw or exposed joints.

B. Chalktray: Manufacturer's standard, continuous.
1. Box Type: Extruded aluminum with slanted front, grooved tray, and cast-aluminum end closures.

C. Map Rail: Provide the following accessories:
1. Display Rail: Continuous and integral with map rail; fabricated from cork approximately 1 to 2 inches (25 to 50 mm) wide.
2. End Stops: Located at each end of map rail.
3. Map Hooks and Clips: Two map hooks with flexible metal clips for every 72 inches (1830 mm) of map rail or fraction thereof.

2.06 FABRICATION

A. Porcelain-Enamel Markerboards: Laminate porcelain-enamel face sheet and backing sheet to core material under heat and pressure with manufacturer's standard flexible, waterproof adhesive.

B. Factory-Assembled Markerboards and Tackboards: Coordinate factory-assembled units with trim and accessories indicated. Join parts with a neat, precision fit.
1. Make joints only where total length exceeds maximummanufactured length. Fabricate with minimum number of joints, balanced around center of board, as acceptable to Architect.
2. Provide manufacturer's standard vertical-joint H-trim system between abutting sections of markerboards.
3. Provide manufacturer's standard mullion trim at joints between markerboards and tackboards of combination units.

C. Aluminum Frames and Trim for Markerboards and Tackboards: Fabricate units straight and of single lengths, keeping joints to a minimum. Miter corners to neat, hairline closure.
1. Trim shall be assembled and attached at manufacturer's factory before shipment.

2.07 ALUMINUM FINISHES

A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.

B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

C. Finish designations prefixed by AA comply with the system established by the Aluminum Association for designating aluminum finishes.

D. Class II, Clear Anodic Finish: AA-M12C22A31 (Mechanical Finish: nonspecular as fabricated; Chemical Finish: etched, medium matte; Anodic Coating: Architectural Class II, clear coating 0.010 mm or thicker) complying with AAMA 611.

## PART 3 - EXECUTION

### 3.01 EXAMINATION

A. Examine substrates and conditions, with Installer present, for compliance with requirements for installation tolerances, surface conditions of wall, and other conditions affecting performance.
   1. If unacceptable conditions are encountered, prepare written report, endorsed by Installer, listing conditions detrimental to performance of work.

B. Examine walls and partitions for proper backing and blocking for markerboards and tackboards.

C. Failure to report defects, if any, will be construed as acceptance of work as executed and will release those responsible for faulty workmanship.

D. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.02 PREPARATION

A. Remove dirt, scaling paint, projections, and depressions that will affect smooth, finished surfaces of markerboards and tackboards.

B. Prepare surfaces to achieve a smooth, dry, clean surface free of flaking, unsound coatings, cracks, defects, and substances that will impair bond between markerboards and tackboards and surfaces.

### 3.03 INSTALLATION, GENERAL

A. General: Install markerboards and tackboards in locations and at mounting heights indicated on Drawings. Keep perimeter lines straight, level, and plumb. Provide grounds, clips, backing materials, adhesives, brackets, anchors, trim, and accessories necessary for complete installation.
   1. For additional rigidity, markerboards and tackboards shall be spot cemented to walls with drywall adhesive 12-inches o.c. in each direction.

### 3.04 INSTALLATION OF FACTORY-FABRICATED MARKERBOARDS AND TACKBOARDS

A. General: Mount markerboards and tackboards in accordance with manufacturer's recommendations.

B. Markerboards And Tackboards: Attach boards to wall surfaces with egg-size adhesive gobs at 16 inches (400 mm) o.c. horizontally and vertically or closer if recommended by manufacturer.

### 3.05 ADJUSTING, CLEANING AND PROTECTION

A. Clean markerboards and tackboards according to manufacturer's written instructions.

B. Touch up factory-applied finishes to restore damaged or soiled areas. Remove and replace markerboards and tackboards that are damaged or do not comply with requirements. Markerboards and tackboards may be repaired or refinished if work complies with requirements and shows no evidence of repair or refinishing as determined by Architect.

C. Cover and protect markerboards and tackboards after installation and cleaning.

END OF SECTION