SECTION 10 11 00
VISUAL DISPLAY UNITS

PART 1 - GENERAL

1.01 SUMMARY
A. Section includes:
   1. Markerboards.
   2. Tackboards.

1.02 PREINSTALLATION CONFERENCE
A. Preinstallation Conference: Conduct conference at Project site.

1.03 ACTION SUBMITTALS
A. Product Data: For each type of product indicated.
B. Shop Drawings: For visual display surfaces. Include plans, elevations, sections, details, and
   attachments to other work.
   1. Show locations of panel joints.
   2. Include sections of typical trim members.
C. Samples: For each exposed product and for each color and texture specified.

1.04 INFORMATIONAL SUBMITTALS
A. Warranties: Sample of special warranties.

1.05 CLOSEOUT SUBMITTALS
A. Maintenance Data: For visual display surfaces to include in maintenance manuals.

1.06 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. Flame-Spread Index: 25 or less.
   2. Smoke-Developed Index: 450 or less.

1.07 WARRANTY
A. Special Warranty for Porcelain-Enamel Face Sheets: Manufacturer's standard form in which
   manufacturer agrees to repair or replace porcelain-enamel face sheets that fail in materials
   or workmanship within specified warranty period.
   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 the building.
PART 2 - PRODUCTS

2.01 MATERIALS, GENERAL

A. Porcelain-Enamel Face Sheet: Manufacturer's standard steel sheet with porcelain-enamel coating fused to steel; uncoated thickness indicated.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
   a. Claridge Products and Equipment, Inc.
   b. PolyVision Corporation; a Steelcase company.

B. Plastic-Impregnated Cork Sheet: Seamless, homogeneous, self-sealing sheet consisting of granulated cork, linseed oil, resin binders, and dry pigments that are mixed and calendared onto fabric backing; with washable vinyl finish and integral color throughout with surface-burning characteristics indicated.

C. Hardboard: ANSI A135.4, tempered.

D. Extruded Aluminum: ASTM B 221, Alloy 6063.

2.02 MARKERBOARD ASSEMBLIES

A. Porcelain-Enamel Markerboards: Balanced, high-pressure, factory-laminated markerboard assembly of three-ply construction consisting of backing sheet, core material, and 0.021-inch-thick, porcelain-enamel face sheet with low-gloss finish.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
   a. Best-Rite Manufacturing.
   b. Claridge Products and Equipment, Inc.
   d. Platinum Visual Systems; a division of ABC School Equipment, Inc.
   e. PolyVision Corporation; a Steelcase company.

2. Manufacturer's Standard Core: Minimum 1/4 inch thick, with manufacturer's standard moisture-barrier backing.

3. Laminating Adhesive: Manufacturer's standard, moisture-resistant thermoplastic type.

2.03 TACKBOARD ASSEMBLIES

A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

1. Best-Rite Manufacturing.
2. Claridge Products and Equipment, Inc.
5. PolyVision Corporation; a Steelcase company.

B. Plastic-Impregnated Cork Tackboard: 1/4-inch-thick, plastic-impregnated cork sheet factory laminated to 1/4-inch-thick hardboard backing.
2.04 MARKERBOARD AND TACKBOARD ACCESSORIES

A. Aluminum Frames and Trim: Fabricated from not less than 0.062-inch thick, extruded aluminum; standard size and shape.
   1. Field-Applied Trim: Manufacturer's standard, slip-on or snap-on trim with no visible screws or exposed joints.

B. Chalktray: Manufacturer's standard, continuous.
   1. Solid Type: Extruded aluminum with ribbed section and smoothly curved exposed ends.

C. Starter Kits: Provide starter kits for each markerboard, visual display conference unit, and installation of visual display wall covering consisting of the following:
   1. Not less than four markers in assorted colors.
   2. Markerboard cleaner in spray bottle, not less than 4 fl. oz.
   3. One eraser for each markerboard surface.

2.05 FABRICATION

A. Porcelain-Enamel Visual Display Assemblies: 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 Visual Display Units: Coordinate factory-assembled units with trim and accessories indicated. Join parts with a neat, precision fit.
   1. Make joints only where total length exceeds maximum manufactured length. Fabricate with minimum number of joints, balanced around center of board, as acceptable to Architect.
   2. Provide manufacturer's standard vertical-joint spline system between abutting sections of markerboards.
   3. Provide manufacturer's standard mullion trim at joints between markerboards and tackboards of combination units.
   4. Where size of visual display boards or other conditions require support in addition to normal trim, provide structural supports or modify trim as indicated or as selected by Architect from manufacturer's standard structural support accessories to suit conditions indicated.

C. Aluminum Frames and Trim: Fabricate units straight and of single lengths, keeping joints to a minimum. Miter corners to a neat, hairline closure.
   1. Where factory-applied trim is indicated, trim shall be assembled and attached to visual display units at manufacturer's factory before shipment.

2.06 ALUMINUM FINISHES

A. Clear Anodic Finish: AAMA 611, AA-M12C22A31, Class II, 0.010 mm or thicker.

PART 3 - EXECUTION

3.01 INSTALLATION

A. Prepare surfaces to achieve a smooth, dry, clean surface free of flaking, unsound coatings, cracks, defects, projections, depressions, and substances that will impair bond between visual display surfaces and wall surfaces.
B. General: Install visual display surfaces 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.

C. Field-Assembled Visual Display Units: Coordinate field-assembled units with grounds, trim, and accessories indicated. Join parts with a neat, precision fit.
   1. Make joints only where total length exceeds maximum manufactured length. Fabricate with minimum number of joints, balanced around center of board, as acceptable to Architect.
   2. Provide manufacturer's standard vertical-joint spline system between abutting sections of markerboards.

D. Visual Display Boards: Attach concealed clips, hangers, and grounds to wall surfaces and to visual display boards with fasteners at not more than 16 inches o.c. Secure both top and bottom of boards to walls.
   1. Field-Applied Aluminum Trim: Attach trim over edges of visual display boards and conceal grounds and clips. Attach trim to boards with fasteners at not more than 24 inches o.c.
      a. Attach chalktrays to boards with fasteners at not more than 12 inches o.c.

E. Clean visual display surfaces according to manufacturer's written instructions. Attach one cleaning label to visual display surface in each room. Cover and protect visual display surfaces.

END OF SECTION