

Section 10 10 05 Visual Display Boards, Projection Screens, & Classroom Specialties

Specifications

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PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Marker Boards; Tackboards
- B. Trim, Chalkrail, and accessories.

1.03 REFERENCES

- B. ASTM B221 - Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes, and Tubes.
- B. ASTM C543 - Slate Blackboards.
- C. ASTM E84 - Test Method for Surface Burning Characteristics of Building Materials.
- D. FS CCC-W-408 - Wall Covering, Vinyl-Coated.
- E. FS L-P-1040 - Plastic Sheets and Strips, Polyvinyl Fluoride.
- F. HPMA HP - Hardwood and Decorative Plywood.

1.04 SUBMITTALS

- A. Submit under provisions of Section 01 33 00.
- B. Shop Drawings: Indicate wall elevations, dimensions, joint locations, special anchor details.
- C. Product Data: Provide data on marker boards, tackboards, tackboard surface covering, and trim and accessories, projection screens, ballet barre and brackets.
- D. Samples: Submit two (2) samples illustrating materials and finish, color and texture of chalkboard, chalkboard and trim, tackboard, and tackboard surfacing.

1.05 OPERATION AND MAINTENANCE DATA

- A. Maintenance Data: Include data on regular cleaning, stain removal.

1.06 REGULATORY REQUIREMENTS

- A. Conform to applicable code for flame/smoke rating for vinyl fabric covered tackboards in accordance with ASTM E84.

1.07 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing the Products specified in this section with minimum three (3) years documented experience.

1.08 FIELD MEASUREMENTS

- A. Verify that field measurements are as indicated on shop drawings and instructed by the manufacturer.

1.09 WARRANTY

- A. Provide five (5) year warranty under provisions of Section 01 70 00.
- B. Warranty: Coverage of chalkboard surface from discoloration due to cleaning, crazing, cracking, staining.

PART 2 PRODUCTS

2.01 MANUFACTURERS – VISUAL DISPLAY BOARDS

- A. Carolina Chalkboards.
- B. Nelson Adams.
- C. Claridge

2.02 MARKER BOARD

- A. Backing: 3/8 inch particleboard with 0.015 inch aluminum backing sheet.
- B. LCS face: 24 gauge steel off-white porcelain enamel finish.

2.03 TACKBOARD SURFACING MATERIAL

- A. Backing: 1/4 inch thick hardboard with foil face.
- B. Cork: Fine grain natural cork, homogeneous composition 1/4" thick.
- C. Tackboard Covering: Vinyl roll stock
 - 1. Carolina Tackboard No. 1950
 - 2. Claridge Fabriccork
 - 3. Colors: To be selected.

2.04 CORE AND FRAME MATERIALS

- A. Frame and Chalkrail: Aluminum extrusions, ASTM B221, 6061 alloy, temper.
 - 1. Claridge - head #275A, Sides #273A, mullion #272A, chalktrough #271A.
 - 2. Carolina trim series 600.
- B. Grounds: Aluminum extrusions, surface applied.
 - 1. Claridge: No. 277 ground clip

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2. Carolina: Ground System.

2.05 ACCESSORIES

- A. Adhesives: Type used by manufacturer.
- B. Map Supports: Formed aluminum sliding hooks, roller brackets, to fit map rail.
- C. Flag Holder: Formed aluminum to fit map rail.

2.06 FINISHES

- A. Tackboard Surface: Vinyl color to be selected. Class "A" fire rated.
- B. Aluminum Frame, Chalkrail, and Accessories: Anodized to dull finish.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that internal wall blocking is ready to receive work and positioning dimensions are as instructed by the manufacturer.
- B. Prior to work by other trades above ceiling, conduct coordination meeting with all other associated trades (including fire alarm and HVAC) so as to assure there are no conflicts with placement of other work above ceiling, nor in path of projection between the projectors and screens.

3.02 INSTALLATION

- A. Install marker boards, and tackboards in accordance with manufacturer's instructions.
- B. Secure units level and plumb.
- C. Marker boards: Butt panels tight with concealed spline to hairline joint. Set marker board tight in frame, butt joints tight, hairline.

3.03 MOUNTING HEIGHTS

- A. Mounting heights from finish floor to bottoms of markerboard units:
 - 1. All Workrooms & Staff Areas 32 inches.

3.04 CLEANING

- A. Clean work under provisions of 01 70 00; Clean surfaces in accordance with manufacturer's instructions.
- B. Cover surfaces with protective cover, taped to frame; remove protection at Substantial Completion.

3.05 SCHEDULE

- A. Markerboard/Tackboard Assembly: 4'-0" high x varying lengths. Refer to Drawings for lengths and locations.
- B. Rollerbrackets: 2 per markerboard.
- C. Chalkthrough: Continuous trim at each markerboard. Provide solid end caps w/ radiused edges, each end.

END OF SECTION

Section 10 14 00 Interior Signage

Specifications

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PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Interior integrated modular signage system for informational signage.

1.02 RELATED SECTIONS

- A. Section 09 26 16 - Gypsum Board Systems.
- B. Section 09 90 00 – Painting.

1.03 REFERENCES

- A. ANSI A117.1: Providing Accessibility and Usability for Physically Handicap People, 1986 edition.
- B. Department of Justice, Office of the Attorney General, "Americans with Disabilities Act", Public Law 101-336, (ADA).
- C. 2010 Standards for Accessible Design (SAD): The updated ADAAG (ADA Accessibility Guidelines), effective on March 15, 2011 and made mandatory on March 16, 2012.

1.04 SYSTEM DESCRIPTION

- A. Signage under this section is intended to include items for identification, direction, control, and information of building where installed as complete integrated system from a single manufacturer.
- B. ADA design requirements:
 - 1. Provide signage that conforms to the requirements of all regulatory agencies holding jurisdiction.
 - 2. Comply with all applicable provisions of the 2010 Standards for Accessible Design (the updated ADA Accessibility Guidelines, ADAAG), effective in March 2011. Requirements include, but are not limited to the following:
 - a. Tactile copy must be all upper case and raised at least 1/32". Tactile characters must be sans serif, not italic, not oblique, script or highly decorative.
 - b. The stroke width of the upper case "I" has to be 15% of the letter height or less. The character width of the uppercase "O" must be between 55% and 100% of the height of the corresponding uppercase "I".
 - c. The copy height for tactile information must be between 5/8" and 2". If separate visual characters are provided, raised characters can be 1/2" and need not contrast with the background.
 - d. The distance between characters on tactile copy must be a minimum of 1/8" and a maximum of 4 times the character stroke width. These distances are measured between the closest points of adjacent characters.
 - e. Spacing between lines of tactile copy needs to be a minimum of 135% and a maximum of 170% of the corresponding upper case "I" height (measured from baseline to baseline).
 - f. Braille must be Grade II and positioned directly below the corresponding raised characters. If text is multi-lined, Braille is placed below the entire body of text and separated 3/8" from any other tactile characters and 3/8" minimum from raised borders and decorative elements.
 - g. Visual characters and symbols, and their background, are to have a non-glare finish. The color of raised characters must contrast as much as possible with their background to make sure signs are more legible for persons with low vision.
 - h. Pictograms, selected from International Standards, are to be located within a 6" vertical void and accompanying text descriptions are to be located directly below the pictogram.

1.05 SUBMITTALS

- A. Submit under provisions of Section 01 33 00.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Manufacturer's product literature indicating units and designs selected.
 - 2. Evidence of manufacturer's computerized data retrieval program for tracking of project for sign typography, message strip requirements and other pertinent data from schedule input to final computerized typography on finished product.
 - 3. Preparation instructions and recommendations.

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4. Storage and handling requirements and recommendations.
 5. Installation methods.
 - C. Samples: One full size sign sample illustrating the design, construction, colors, typestyles, mounting method and other details as specified. Provide sample in small size sign.
 1. Samples will not be returned for use in Project.
 - D. Shop Drawings:
 1. Indicate materials, sizes, configurations, and applicable substrate mountings.
 2. Typography sample for message strips and headers copy.
 - E. Signage Schedule: Complete with location of each sign and the required copy/text.
 - F. Sign Program Maintenance Plan:
 1. Manufacturer shall provide details of software and system of color coated, pre-perforated paper sign inserts allowing client to update and maintain signage graphics in-house.
 2. Manufacturer shall provide details of an Online Reordering & Maintenance Application whereby the client can submit sign reorders online and store relevant project information such as sign type drawings, message schedules and product instructions.
 - G. Contract close out:
 1. Furnish appropriate checklist for aiding in reordering after Date of Substantial Completion. Maintain computer schedule program for five years for ordering new signage required by Owner.
 2. Maintenance data and cleaning requirements for exterior surfaces.
 3. Furnish one complete software package in Owner selected format for PC type computer.
- 1.06 QUALITY ASSURANCE
- A. Manufacturer Qualifications:
 1. Work required under this section from manufacturer regularly engaged in work of this type and scope for a minimum of 5 years.
 2. Maintain computer link between schedule input and computerized typography production.
 - B. Installer Qualifications: Trained and authorized by manufacturer for installations of required scope and product.
 - C. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
 1. Finish areas designated by Architect.
 2. Do not proceed with remaining work until workmanship, graphics, and installation are approved by Architect.
 3. Refinish mock-up as required to produce acceptable work.
- 1.07 DELIVERY, STORAGE, AND HANDLING
- A. Package signs to prevent damage during shipment, handling, storage and installation. Products are to remain in their original packaging (unless otherwise specified) until removal is necessary for installation.
 - B. If installation site is not ready for signage upon delivery, store signs in a dry, air-conditioned environment.
 - C. Handle signage in accordance with manufacturer's instructions.
 - D. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.
- 1.08 PROJECT CONDITIONS
- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.
- 1.09 SEQUENCING AND SCHEDULING
- A. Schedule system installation after room finishes and fixtures have been completed.
- 1.10 WARRANTY
- A. Product Warranty: Provide manufacturer's warranty against defects in materials and workmanship for a period of one year.

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PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Acceptable Manufacturers:
 - 1. APCO Signs
 - 2. 2/90 Sign Systems
 - 3. ASI Sign Systems

2.02 SYSTEM REQUIREMENTS

- A. General:
 - 1. Sign system shall feature solutions for all required sign types, including but not limited to wall mounted primary room identification, regulatory and information signs. All signs within the system must feature the same family of components and convey a uniform look throughout.
- B. Features:
 - 1. Updatability: Signs shall allow for updating of message inserts without the need to replace the entire sign assembly. System shall offer a solution for in-house updating of laser printed sign inserts for all sign types.
 - 2. Mounting: Signs shall accommodate installation via fully concealed mechanical fasteners.
- C. Graphics and Typography: As selected from manufacturer's standards.
- D. Colors and Finishes: As selected from manufacturer's standards.
- E. ADA Compliance: Sign system shall comply with all applicable provisions of the 2010 Standards for Accessible Design (the updated ADA Accessibility Guidelines, ADAAG), effective in March 2011. This includes requirements regarding which sign types require Braille/tactile features, character heights, raised character spacing, raised character stroke width, color contrast and installation locations and mounting heights within the facility.
- F. Materials and Construction:
 - 1. Frames/holders: Sign frame/holder assemblies shall feature extruded aluminum edge profiles with an option of low-profile injection molded plastic edge profiles for small signs. Aluminum extrusions shall be alloy 6063-T6. Optional plastic edge profiles shall be integrally colored injection molded UV and impact resistant ASA (Acrylonitrile Styrene Acrylate) for durability and product longevity. Sign frames shall feature an overall depth of 5/8" or less and must accommodate updatable message panels and inserts.
 - 2. Braille / Tactile Components: PETG-backed photopolymer with raised characters and Braille of minimum 1/32 inch (0.8 mm) depth/thickness. Adhesive applied tactile characters and applied Braille dots will not be acceptable.
 - 3. Fasteners: Signs shall be able to accommodate fully concealed mechanical fasteners.

2.03 SIGN SYSTEM COMPONENTS

- A. TYPE A SIGNS – ROOM IDENTIFICATION. Reference signage schedule for sign text.
 - 1. Style:
 - a. Match existing.
 - 2. Finish/Color:
 - a. Match existing.
 - 3. Frame Sizes:
 - a. Match existing.
 - 4. Mounting/installation Types:
 - a. Match existing.
- B. TYPE B SIGNS – EXIT SIGN. Reference signage schedule for sign text.
 - 1. Style:
 - a. Match existing.
 - 2. Finish/Color:
 - a. Match existing.
 - 3. Frame Sizes:
 - a. Match existing.
 - 4. Mounting/installation Types:
 - a. Match existing.

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- C. TYPE C SIGNS - Fabricated Dimensional Letters (Qty. 1 Set)
 - 1. Letter: Aluminum, Satin Finish
 - 2. Height: 9" high
 - 3. Depth: 2" deep
 - 4. Back: open
 - 5. Typestyle: San Serif, See Drawings, custom style to match existing dimensional lettering at building.
 - 6. Mounting Method: stud mount letters 1/4" off of millwork.
 - 7. Lettering To Read: OAK GROVE PRIMARY SCHOOL

2.04 FABRICATION

- A. Shop assembly:
 - 1. Fabricate units to configurations indicated on reviewed shop drawings.
 - 2. Provide copy on inserts, and covers required on reviewed shop drawings and in accord with ADA requirements.
 - 3. Provide additional blank paper as specified.
 - 4. Include instruction sheets for removal and replacement inserts and installation.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.02 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.03 INSTALLATION

- A. Install products in accordance with manufacturer's instructions, in locations and with mounting methods as specified in sign and location drawings.
- B. Square, plumb and level all installed products.
- C. Install all signage in accordance with the CURRENT VERSION of the 2010 Standard for Accessible Design (SAD), and any applicable local regulations and/or codes.
- D. Upon completion of the work, sign installer shall remove any unused products, materials, packaging and debris from the installation site.

3.04 CLEANING

- A. Clean all exposed surface not more than 48 hours prior to Date of Substantial Completion in accordance with manufacturer's written cleaning instructions.

3.05 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

3.06 SIGN SCHEDULES

- C. SIGN TYPE A (All Messages Integral Tactile Lettering, Room Numbers also in Braille); QTY 8
 - 1. MESSAGE: TBD
- D. SIGN TYPE B (All Messages Integral Tactile Lettering, Room Numbers also in Braille): QTY 4
 - 1. MESSAGE: EXIT

END OF SECTION

Section 10 44 00 Fire Protection Specialties

Specifications

10 44 00-1

PART 1 - GENERAL

- 1.01 SECTION INCLUDES
- A. Work this section includes the furnishing of all labor, material, tools and services necessary for the complete installation of fire extinguishers and cabinets as shown on the plans and as described in these specifications.
- 1.02 RELATED SECTIONS
- A. 04 22 00 - Concrete Unit Masonry: Rated interior corridor walls to accept cabinets.
 - B. 09 29 16 – Gypsum Board Systems.
- 1.03 QUALITY ASSURANCE
- A. All materials to conform to requirements of NFPA 10 for portable fire extinguishers.
- 1.04 REFERENCES
- A. NFPA 10 - Portable Fire Extinguishers.
 - B. ADAAG - American with Disabilities Act Accessibility Guidelines.
 - C. ASTM E-814 - Fire Rated Cabinet
- 1.05 SUBMITTALS
- A. Submit under provisions of Section 01 33 00.
 - B. Product Data: Provide data on accessories describing size, finish, details of function, attachment methods.
 - C. Manufacturer's Installation Instructions: Indicate special procedures, perimeter conditions requiring special attention.
 - D. Conform to ADAAG code for access for the handicapped.

PART 2 - PRODUCTS

- 2.01 MANUFACTURERS
- A. JL Industries: Cosmopolitan.
 - B. Larsen's; Architectural Series.
- 2.02 MATERIALS
- A. EXTINGUISHERS
 1. One 10# dry chemical, 4A, 40 BC minimum at each location.
 2. Include extinguisher tags with monthly inspection record.
 - B. CABINETS
 1. Cabinets are to be fully recessed with 5/16" trim.
 2. Cabinet must be sized for recessed installation in an 8" cmu wall.
 3. Solid door with black vertical die-cut lettering.
 4. One hour fire rated where located in rated walls.
- 2.03 FINISH
- A. CABINETS
 1. Match existing.

PART 3 - EXECUTION

- 3.01 INSPECTION
- A. Verify rough opening sizes in walls and sufficient blocking for installation of cabinets.
- 3.02 INSTALLATION
- A. Install cabinets in strict accordance with manufacturer's written directions. Install tight and anchor securely to walls. Leave cabinet in clean condition.
 - B. Install so that perimeter rolled edge is tightly against surface of wall; caulk perimeter only if necessary and if directed by Architect to eliminate any crevasses at perimeter.

END OF SECTION

Section 12 20 00 Window Treatments

Construction Documents

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PART 1 GENERAL

1.01 SUMMARY

- A. Section Includes
 - 1. Premium quality manual roller shades
- B. Related Sections:
 - 1. Section 06 10 00: Rough Carpentry
 - 2. Section 08 41 13: Aluminum Entrances and Storefronts
 - 3. Section 08 80 00: Glazing
 - 4. Section 09 29 16: Gypsum Board Systems

1.02 REFERENCES

- A. Flame-resistant materials shall pass or exceed one or more of the following tests
 - 1. National Fire Protection Association (NFPA) 701 (small scale for horizontal applications)

1.03 SUBMITTALS

- A. Product data: Manufacturer's descriptive literature shall be submitted indicating materials, finishes, construction and installation instructions and verifying that product meets requirements specified. Manufacturers recommendations for maintenance and cleaning shall be included.
- B. Drawings and diagrams: Wiring diagrams of any motorized components or units, working and assembly drawings shall be supplied as requested.
- C. Sample: Responsible contracting officer or agent shall supply one sample shade of each type specified in this contract for approval. Supplied units shall be furnished complete with all required components, mounting and associated hardware, instructions and warranty.

1.04 QUALITY ASSURANCE:

- A. Supplier: Manufacturer, subsidiary or licensed agent shall be approved to supply the products specified, and to honor any claims against product presented in accordance with warranty.
- B. Installer: Installer or agent shall be qualified to install specified products by prior experience, demonstrated performance and acceptance of requirements of manufacturer, subsidiary, or licensed agent. Installer shall be responsible for an acceptable installation.
- C. Uniformity: Provide Manual Roller Shades of only one manufacturer for entire project.

1.05 DELIVERY, STORAGE AND HANDLING:

- A. Product shall be delivered to site in manufacturer's original packaging.
- B. Product shall be handled and stored to prevent damage to materials, finishes and operating mechanisms.

1.06 JOB CONDITIONS:

- A. Prior to shade installation, building shall be enclosed.
- B. Interior temperature shall be maintained between 60° F. and 90° F. during and after installation; relative humidity shall not exceed 80%. Wet work shall be complete and dry.

1.07 WARRANTY:

- A. Lifetime Limited Warranty. Fabrics warranted for 5 years. Specific product warranties available from manufacturer or its authorized agent.

PART 2 PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Hunter Douglas Contract
- B. MechoShade Systems