# DOCUMENT 00 90 00 ADDENDUM

ADDENDUM NO. [1] Date: February 18, 2016

RE: BLACK RIVER MEMORIAL HOSPITAL

**CALHOUN REMODELING** 

**311 HWY A** 

**BLACK RIVER FALLS, WISCONSIN** 

**HSR PROJECT NO. 15023** 

FROM: HSR Associates, Inc.

100 Milwaukee Street La Crosse, WI 54603 (608) 784-1830

To: Prospective Bidders

This addendum forms a part of the Contract Documents and modifies the original Bidding Documents dated February 2, 2016. Acknowledge receipt of this Addendum in the space provided on the bid form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of [3] page, [5] specification sections, and [2] 30 x 42 drawings.

## **CHANGES TO BIDDING REQUIREMENTS:**

1. Pre-bid meeting attendance attached hereto.

## **CHANGES TO CONDITIONS OF THE CONTRACT:**

- 2. Section 00 73 00 SUPPLEMENTARY CONDITIONS
  - a. The Owner has requested sales tax savings on light fixtures. Add the following under Article 3:

After 3.6.1, add the following:

"3.6.2 The Owner will be responsible for any and all Wisconsin Sales Tax imposed on any direct purchases of materials or supplies made by the Owner. The Owner is a nonprofit entity exempt from payment of sales tax pursuant to Wisconsin Statutes, Section 77.54(a). Contractors shall include sales tax on all items in their bid. Upon award of contract, light fixtures will be a direct purchase by Owner and sales tax shall be deducted by change order. The Contractor shall have a purchasing entity organized in accordance with Wisconsin Department of Revenue statutes. The Contractor shall provide the Owner a list of products/suppliers, including amount of product and purchase amount of material for which purchase orders are required. The Owner creates purchase orders and the Contractor uses them to order materials. Upon delivery to the site the Contractor shall inspect materials to insure invoiced amounts match the corresponding purchase order before turning the invoices over to the Owner for payment

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## 3. Section 01 50 00 TEMPORARY FACILITIES AND CONTROLS

- a. 1.04, B: Add paragraph 3 as follows:
  - -Furnish and install all necessary temporary wiring and lighting for use of all Contractors.
  - -Lighting: One 200 watt lamp per 625 square feet (25 feet on center).
  - -Receptacles: One 20 amp 120 volt duplex grounding type per 2,500 SF (50 feet on center) with ground fault circuit protection, installed in outlet boxes with plates.
  - -Power connections: Provide 240V/60/1 service for saws, pipe cutting and threading machines, etc. as requested.
  - -When installation of the permanent electrical service and distribution system is sufficiently complete to be operated safely, the system may be used to provide construction light and power and testing and operation of permanent equipment.

## **CHANGES TO SPECIFICATIONS:**

- 4. Section 08 11 16 ALUMINUM DOORS AND FRAMES
  - a. Section attached hereto for exterior flush aluminum doors.
- 5. Section 10 11 01 VISUAL DISPLAY BOARDS
  - a. Section attached hereto.
- 6. Section 11 52 13 PROJECTION SCREENS
  - a. Section attached hereto.
- 7. Section 12 21 16 VERTICAL LOUVER BLINDS
  - a. Section attached hereto.
- 8. Section 12 24 00 WINDOW SHADES
  - a. Section attached hereto.

## **CHANGES TO DRAWINGS**

- 9. Sheet A100R REMOVAL, REMODEL AND RCP PLANS
  - a. 30 x 42 sheet attached hereto with highlighted revisions including, but not limited to the following:
  - b. At vertical ladder in IT Room 129 construct as follows:
    - -Side Rails: 3/8 x 2 inches members spaced at 20 inches.
    - -Rungs: one inch diameter solid round bar spaced 12 inches on center.
    - -Space rungs 7 inches from wall surface.
    - -2" x 11"x 3/8" brackets for wall attachment. Locate at top and bottom and two equally spaced locations between (4) total each side).
    - -Install blocking in wall for attachments at bracket locations.

## 10. Sheet A600R SCHEDULES AND ELEVATIONS

- a. 30 x 42 sheet attached hereto with highlighted revisions including, but not limited to the following:
- b. Window shades have added. See Room Schedule Remarks 7 and 8 referenced at required rooms on schedule.
- c. Door Schedule: Door thickness and frame depths have been revised.

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## 11. Sheet E100 ELECTRICAL LIGHTING AND POWER PLANS

- a. DME Retail 126: Relocate receptacles and data outlets to new desk location at west end of room as shown on plan A100.
- b. Conf. Room 112:
  - i. Provide duplex receptacle flush in ceiling for projector connect to room receptacle circuit.
  - ii. Provide electrical connection to powered screen on south wall. Electrical shall install screen operator switch furnished with screen. Connect to existing room receptacle branch circuit
- c. Light fixture schedule: See Article 2 above for tax savings and Owner direct purchase of light fixtures.

## **CHANGES TO DRAWINGS**

Section 09 84 00 Acoustic Room Components: Interior Systems, La Crosse, WI.

**END OF DOCUMENT 00 90 00** 

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## SECTION 08 11 16 ALUMINUM DOORS AND FRAMES

## **PART 1 GENERAL**

## 1.01 SECTION INCLUDES

- A. Flush aluminum doors with aluminum faces.
- B. Aluminum door frames for doors specified in this section.

## 1.02 RELATED REQUIREMENTS

- A. Section 07 92 00 Joint Sealants: Sealing joints between door frames and adjacent construction.
- B. Section 08 71 00 Door Hardware: Hardware for aluminum doors.

#### 1.03 REFERENCE STANDARDS

- A. AAMA 609 & 610 Cleaning and Maintenance Guide for Architecturally Finished Aluminum (Combined Document); 2015.
- B. AAMA 611 Voluntary Specification for Anodized Architectural Aluminum; 2012.
- C. AAMA 701/702 Voluntary Specifications for Pile Weatherstripping and Replaceable Fenestration Weatherseals; 2011.
- D. AAMA 2604 Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels; 2013.
- E. ASTM A123/A123M Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products; 2015.
- F. ASTM B209 Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate; 2014.
- G. ASTM B209M Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate [Metric]; 2014.
- H. ASTM B221 Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes; 2014.
- I. ASTM B221M Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes [Metric]; 2013.
- J. ASTM C1363 Standard Test Method for Thermal Performance of Building Materials and Envelope Assemblies by Means of a Hot Box Apparatus; 2011.

## 1.04 SUBMITTALS

- A. See Section 01 30 00 Administrative Requirements, for submittal procedures.
- B. Product Data: Manufacturer's descriptive literature for each type of door; include information on fabrication methods.
- C. Shop Drawings: Include elevations of each opening type.
  - 1. Verify dimensions by field measurements before fabrication and indicate on shop drawings.
- D. Selection Samples: Complete set of color and finish options, using actual materials, for Architect's selection.

## 1.05 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Not less than 5 years of experience in manufacturing components of the types specified.
- B. Installer Qualifications: Firm with documented experience in installing components of the types specified.

## 1.06 DELIVERY, STORAGE, AND HANDLING

- A. Deliver aluminum components in manufacturer's standard protective packaging, palleted, crated, or banded together.
- B. Inspect delivered components for damage and replace. Repaired components will not be accepted.
- C. Store components under cover in manufacturer's packaging until installation.

### 1.07 FIELD CONDITIONS

- A. Field Measurements: Verify dimensions by field measurements before fabrication and indicate on shop drawings. Coordinate fabrication with project schedule to avoid delays in the work.
- B. Do not begin installation of interior aluminum components until space has been enclosed and ambient thermal conditions are being maintained at levels consistent with final project requirements.

### **PART 2 PRODUCTS**

## 2.01 MANUFACTURERS

- A. Provide exterior swing door products complying with specified requirements and manufactured by one of the following:
  - 1. Cline Aluminum Doors, Inc: www.clinedoors.com.
  - 2. YKK AP: www.ykkap.com
  - 3. United States Aluminum: www.usalum.com
  - 4. Tubelite Storefronts and Entrances: www.tubelite.com
  - 5. Kawneer Co: www.kawneer.com
  - 6. Substitutions: See Section 01 60 00 Product Requirements.

## 2.02 DOORS AND FRAMES

- A. Flush Doors with Aluminum Faces: Aluminum internal framing and faces; no steel components.
  - 1. Thickness: 1-3/4 inches (44 mm), nominal.
  - 2. Facing: Seamless aluminum sheet, 0.06 inch (1.52 mm), smooth texture, laminated to foam panel core.
  - 3. Finish: Pigmented polyvinylidene fluoride.
  - 4. Weatherstripping: Replaceable pile type; at jambs and head of exterior doors.
- B. Door, Sidelight, and Transom Frames: Extruded aluminum hollow or C-shaped sections; no steel components.
  - 1. Frame Depth: 4-1/4 inches (108 mm).
  - 2. Finish: Same as doors.
  - 3. Weatherstripping: Replaceable pile type; at jambs and head.
- C. Dimensions and Shapes: As indicated on drawings; dimensions shown are nominal.
  - Provide clearances as follows:
    - a. Hinge and Lock Stiles: 0.125 inch (3.2 mm).
    - b. Between Meeting Stiles: 0.25 inch (6.3 mm).
    - c. At Top Rail and Bottom Rail: 0.125 inch (3.2 mm).

## 2.03 COMPONENTS

- A. Flush Door Panels: Without visible seams on face.
  - 1. Framing and Hardware Backup: Extruded aluminum tubing, 0.125 inch (3 mm) minimum thickness.
  - 2. Top, Side, and Bottom Edges: Extruded aluminum cap.
  - 3. Exterior Doors Insulating Value: U-value of 0.50 BTU/hr sq ft deg F (2.84 W/sq m deg K), when tested in accordance with ASTM C1363.
  - 4. Core: Rigid insulating material of not less than 2.0 pounds per cubic foot (32 kg/cu m) density.
  - 5. Laminating Adhesive: Manufacturer's standard low-VOC materials.
- B. Frames: Extruded aluminum shapes, not less than 0.062 inch (1.6 mm) thick, reinforced at hinge and strike locations.
  - 1. Corner Brackets: Extruded aluminum, fastened with stainless steel screws.
  - 2. Trim: Extruded aluminum, not less than 0.062 inch (1.6 mm) thick, removable snap-in type without exposed fasteners.

## 2.04 MATERIALS

- A. Aluminum Sheet: ASTM B209 (ASTM B209M), alloy 5005-H14, stretcher leveled.
- B. Extruded Aluminum: ASTM B221 (ASTM B221M), alloy 6063-T5 or alloy 6463-T5.
- C. Natural Anodized Finish: Clear anodic coating; AAMA 611 AA-M12C22A31 Class II, minimum thickness 0.4 mil (0.010 mm).
- D. Coated Finish: Pigmented high performance organic coating; polyvinylidene fluoride (PVDF) complying with requirements of AAMA 2604; color as selected from manufacturer's full range by Architect.

## 2.05 ACCESSORIES

- A. Replaceable Weatherstripping: AAMA 701/702 wool pile.
- B. Fasteners: Aluminum, non-magnetic stainless steel, or other material warranted by manufacturer as non-corrosive and compatible with aluminum components.
- C. Brackets and Reinforcements: Manufacturer's high-strength aluminum units where feasible, otherwise, non-magnetic stainless steel or steel hot-dip galvanized in compliance with ASTM A123/A123M.
- D. Bituminous Coating: Cold-applied asphaltic mastic, compounded for 30-mil (0.76 mm) thickness per coat.

## **PART 3 EXECUTION**

### 3.01 EXAMINATION

A. Verify that wall surfaces and openings are ready to receive frames and are within tolerances specified in manufacturer's instructions.

## 3.02 PREPARATION

- A. Perform cutting, fitting, forming, drilling, and grinding of frames as required for project conditions.
- Replace components with damage to exposed finishes.
- C. Separate dissimilar metals to prevent electrolytic action between metals.

## 3.03 INSTALLATION

- A. Install doors and frames in accordance with manufacturer's instructions and approved shop drawings.
- B. Set frames plumb, square, level, and aligned to receive doors. Anchor frames to adjacent construction in strict accordance with manufacturer's recommendations and within specified tolerances.
- C. Where aluminum surfaces contact metals other than stainless steel, zinc, or small areas of white bronze, protect from direct contact by painting dissimilar metal with heavy coating of bituminous paint, applying elastomeric sealant between the different metals, or using nonabsorptive tape or gasket in permanently dry locations.
- D. Hang doors and adjust hardware to achieve specified clearances and proper door operation.
- E. Install door hardware as specified in Section 08 71 00.

## 3.04 CLEANING

- A. Upon completion of installation, thoroughly clean door and frame surfaces in accordance with AAMA 609 & 610.
- B. Do not use abrasive, caustic, or acid cleaning agents.

## 3.05 PROTECTION

- A. Protect products of this section from damage caused by subsequent construction until Date of Substantial Completion.
- B. Replace damaged or defective components that cannot be repaired to a condition indistinguishable from undamaged components.

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## SECTION 10 11 01 VISUAL DISPLAY BOARDS

## **PART 1 GENERAL**

## 1.01 SECTION INCLUDES

A. Markerboards.

## 1.02 RELATED REQUIREMENTS

A. Section 09 21 16 - Gypsum Board Assemblies: Concealed supports in metal stud walls.

## 1.03 REFERENCE STANDARDS

- A. ANSI A135.4 American National Standard for Basic Hardboard; 2012.
- B. ASTM A424/A424M Standard Specification for Steel, Sheet, for Porcelain Enameling; 2009a.
- C. ASTM C1396/C1396M Standard Specification for Gypsum Board; 2014.
- D. ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials; 2015a.

## 1.04 SUBMITTALS

- A. See Section 01 30 00 Administrative Requirements, for submittal procedures.
- B. Product Data: Provide manufacturer's data on markerboard, trim, and accessories.
- C. Shop Drawings: Indicate wall elevations, dimensions, joint locations, special anchor details.
- D. Manufacturer's printed installation instructions.
- E. Maintenance Data: Include data on regular cleaning, stain removal.

## 1.05 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.

## 1.06 WARRANTY

- A. See Section 01 78 00 Closeout Submittals, for additional warranty requirements.
- B. Provide one year warranty for markerboard to include warranty against discoloration due to cleaning, crazing or cracking, and staining.

## **PART 2 PRODUCTS**

## 2.01 MANUFACTURERS

- A. Visual Display Boards:
  - 1. MooreCo, Inc: www.moorecoinc.com.
  - Claridge Products and Equipment, Inc. www.claridgeproducts.com.
  - 3. Polyvision Corporation (Nelson Adams): www.polyvision.com.
  - 4. W.E. Neal Slate Co. www.nealslate.com
  - 5. Substitutions: See Section 01 60 00 Product Requirements.

## 2.02 VISUAL DISPLAY BOARDS

- A. Markerboards: Porcelain enamel on steel, laminated to core.
  - 1. Color: White. Surface shall be compatible for projection purposes.
  - 2. Steel Face Sheet Thickness: 24 gage, 0.0239 inch (0.61 mm).
  - 3. Core: Gypsum board, manufacturer's standard thickness, laminated to face sheet.
  - 4. Backing: Aluminum foil, laminated to core.
  - Size: As indicated on drawings.
  - 6. Frame: Extruded aluminum, with concealed fasteners.
  - 7. Frame Profile: manufacturer's standard
  - 8. Frame Finish: Anodized, natural.
  - 9. Accessories: Provide chalk tray, map rail, and tack strip.

## 2.03 MATERIALS

- A. Porcelain Enameled Steel Sheet: ASTM A424/A424M, Type I, Commercial Steel, with fired-on vitreous finish.
- B. Gypsum Board: ASTM C1396/C1396M, paper/foil faced, plain type.
- C. Foil Backing: Aluminum foil sheet, 0.005 inch (0.13 mm) thick.

### 2.04 ACCESSORIES

- A. Map Rail: Extruded aluminum, manufacturer's standard profile, with cork insert and runners for accessories; 1 inch (25 mm) wide overall, full width of frame. Extend over top of tack boards when end to end with markerboards.
- B. Map Supports: Formed aluminum sliding hooks and roller brackets to fit map rail.
- C. Temporary Protective Cover: Sheet polyethylene, 8 mil (0.2 mm) thick.
- D. Chalk Tray: Aluminum, manufacturer's standard profile, one piece full length of chalkboard, molded ends, concealed fasteners, same finish as frame.
- E. Mounting Brackets: Concealed.

## **PART 3 EXECUTION**

### 3.01 EXAMINATION

- A. Verify that field measurements are as indicated.
- B. Verify that internal wall blocking is ready to receive work and positioning dimensions are as indicated on shop drawings.

## 3.02 INSTALLATION

- A. Install boards in accordance with manufacturer's instructions.
- B. Secure units level and plumb.

## 3.03 CLEANING

- A. Clean board surfaces in accordance with manufacturer's instructions.
- B. Cover with protective cover, taped to frame.
- C. Remove temporary protective cover at Date of Substantial Completion.

## SECTION 11 52 13 PROJECTION SCREENS

## **PART 1 GENERAL**

## 1.01 SECTION INCLUDES

A. Front projection screen assemblies.

### 1.02 RELATED REQUIREMENTS

- A. Section 09 51 00 Suspended Acoustical Ceilings: Suspended panel ceilings for recessed screens.
- B. Division 26: Electrical supply, conduit, and wiring for electric motor operated projection screens.

### 1.03 SUBMITTALS

- See Section 01 30 00 Administrative Requirements, for submittal procedures.
- B. Product Data: Manufacturer's catalog cuts and descriptive information on each product to be used, including:
  - 1. Preparation instructions and recommendations.
  - 2. Storage and handling requirements and recommendations.
  - Installation methods.
- C. Shop Drawings: For custom installations, indicate dimensions, verified field measurements, mounting details, and interface with adjacent construction.
- D. Operation and Maintenance Data: Provide manufacturer's operation and maintenance instructions.
- E. Warranty: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.

## 1.04 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Experienced in manufacturing products specified in this section.
- B. Installer Qualifications: Experienced in installation of the work of this section.

## 1.05 DELIVERY, STORAGE, AND HANDLING

- A. Deliver projection screens to project site in manufacturer's original unopened packaging. Inspect for damage and size before accepting delivery.
- B. Store in a protected, clean, dry area with temperature maintained above 50 degrees F (10 degrees C). Stack according to manufacturer's recommendations.
- C. Acclimate screens to building temperatures for 24 hours prior to installation, or in accordance with manufacturer's recommendations.

## 1.06 FIELD CONDITIONS

A. Maintain interior of building between 60 degrees F (15 degrees F) and 75 degrees F (24 degrees F) during and after installation of projection screens.

## **PART 2 PRODUCTS**

## 2.01 FRONT PROJECTION SCREENS

- A. Manufacturers Electric Operation:
  - 1. Da-Lite Screen Company, Model Advantage Electrol: www.da-lite.com.
  - 2. Draper, Inc, Model Access/E: www.draperinc.com.
- B. Front Projection Screens: Factory assembled unless otherwise indicated.
  - 1. Dimensions: 6' wide.
  - 2. In location identified on Drawingss: Motorized, matte light diffusing fabric screen, horizontally tensioned, wall mounted.
- C. Matte Light Diffusing Fabric: Light diffusing screen fabric; washable, flame retardant and mildew resistant.
- D. Concealed-in-Ceiling Screen Cases: Steel; integral roller brackets.
  - 1. Door Slat: Self trim; self-closing and -opening.
  - 2. Case Finish: Baked enamel.
  - 3. Case Color: White.
  - 4. End Caps: Steel; finished to match case.
  - 5. Electrically-Operated Screens: 1-1/2 inch (38 mm) aluminum door roller.

- E. Electrically-Operated Screens:
  - 1. Roller: 2 inch (51 mm) aluminum, with locking device.
  - 2. Vertical Tensioning: Screen fabric weighted at bottom with steel bar with plastic end caps.
- F. Provide mounting hardware, brackets, supports, fasteners, and other mounting accessories required for a complete installation, in accordance with manufacturer's recommendations for specified substrates and mountings.

## 2.02 ELECTRICAL COMPONENTS

- A. Electrical Components: Listed and classified by UL as suitable for the purpose specified and indicated.
- B. Motors: Direct drive, 110 V. 60 Hz.
  - I. Screen Motor: Mounted inside roller; three wire with ground; quick reverse type and lifetime lubricated; equipped with thermal overload cut-off, internal junction box, electric brake, and pre-set accessible limit switches.
    - a. Electrical Characteristics: 1.2 amps.
    - b. Motor mounted on sound absorber.
- C. Controls: Three (3) position control switch with plate.

#### **PART 3 EXECUTION**

#### 3.01 EXAMINATION

- A. Verify that substrate is finished and ready to accept screen installation.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
- C. Verify that openings for recessed screens are correctly sized.
- D. Verify type and location of electrical connections.
- E. Do not install projection screens until climate control systems are in place and interior painting and other finishes are completed.

### 3.02 PREPARATION

- A. Coordinate screen installation with installation of projection systems.
- B. Coordinate installation with adjacent construction and fixtures, including ceilings, walls, lighting, fire suppression, and registers and grilles.

## 3.03 INSTALLATION

- A. Install in accordance with manufacturer's instructions, using manufacturer's recommended hardware for relevant substrates.
- B. Do not field cut screens.
- C. Install screens in mountings as specified and as indicated on drawings.
- D. Install plumb and level.
- E. Install electrically operated screens ready for connection to power and control systems by others.
- F. Adjust projection screens and related hardware in accordance with manufacturer's instructions for proper placement and operation.
- G. Test electrical screens for proper working condition. Adjust as needed.

## 3.04 PROTECTION

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

## SECTION 12 21 16 VERTICAL LOUVER BLINDS

## **PART 1 GENERAL**

## 1.01 SECTION INCLUDES

A. Vertical louver blinds at locations identified on plans.

## 1.02 RELATED REQUIREMENTS

- A. Applicable provisions of Division 1 shall govern the work of this section.
- B. Section 12 24 00 Window Shades.

#### 1.03 DEFINITIONS

- A. Light and Privacy Scale:
  - 1. Level One (1): Reduces glare and still reveals considerable details to the outside, provides no privacy.
  - 2. Level Two (2): Softens the light and still reveals some details to the outside. Provides moderate privacy.
  - 3. Level Three (3): Softens the light but reveals shadow-like outlines to the outside, provides substantial privacy.
  - 4. Level Four (4): Diffuses the light and reveals no shape or details to the outside. Provides complete privacy and room-darkening options.
  - 5. Level Five (5): Blocks virtually all the light and provides the most privacy and light control available.

### 1.04 REFERENCE STANDARDS

- A. WCMA A100.1 Safety of Corded Window Covering Products; Window Covering Manufacturers Association; 2014. (ANSI/WCMA A100.1)
- B. NFPA 701 Standard Methods of Fire Tests for Flame Propagation of Textiles and Films; National Fire Protection Association; 2015.

## 1.05 SUBMITTALS

- A. See Section 01 30 00 Administrative Requirements, for submittal procedures.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
  - 1. Preparation instructions and recommendations.
  - 2. Storage and handling requirements and recommendations.
  - Installation methods.
- C. Certification: Provide certification that product complies with WCMA A100.1.
- D. Selection Samples: For vanes, color chips or material samples representing manufacturer's full range of available colors and patterns.
- E. Operation and Maintenance Data: Manufacturer's data on repair and replacement of vanes, chains, and other parts.

## 1.06 DELIVERY, STORAGE, AND HANDLING

A. If blinds are delivered early and stored at the project, deliver in unopened containers; handle and store in such a manner to protect them from damage.

## 1.07 PROJECT CONDTIONS

- A. Coordinate the work with window installation and placement of concealed blocking to support blinds where required.
- B. Take field measurements to determine actual sizes required.

## 1.08 EXTRA MATERIALS

- A. See Section 01 60 00 Product Requirements, for additional provisions.
- B. Supply two complete blind units of each size for Owner's use in maintenance of project.
- C. Supply 20 extra vanes of each size for Owner's use in maintenance of project.

## 1.09 WARRANTY

A. Owner's standard 25 year warranty against original defects in materials and workmanship from substantial completion.

### **PART 2 PRODUCTS**

## 2.01 MANUFACTURERS (Single source with Section 12 24 00)

- A. Vertical Louver Blinds:
  - 1. Hunter Douglas: www.hunterdouglas.com.
  - 2. C & G Custom Blinds, Black River Falls, 715-284-4800
  - 3. Levolor Contract: www.levolorcontract.com.
  - 4. Graber, Division of Springs Industries, Inc: www.graberblinds.com.
  - 5. The Blindman Commercial. www.theblindmancommercial.com
  - 6. SWF Contract Shading Systems: www.swfcontract.com
  - 7. Wisconsin draperies; www.wiscdrapery.com
  - 8. Substitutions: See Section 01 60 00 Product Requirements.

## 2.02 BLINDS AND BLIND COMPONENTS

- A. Vertical Louver Blinds: Horizontal travel, vertical vane louver units complete with tracks, pivot and traversing mechanisms, and accessories, as follows:
  - Vanes: PVC vanes of the size indicated.
  - 2. Operation: Manual.
  - 3. Direction of Travel: As indicated on the drawings.
  - 4. Mounting: Inside (between jambs).
  - 5. Cord and Chain Operation: Comply with WCMA A100.1.
- B. Tracks: Channel tracks as required for type of operation, extruded aluminum with clear anodized finish, with end caps.
  - Dimensions: Manufacturer's standard, selected for suitability for installation conditions, span, and weight of vanes.
  - 2. Vane Rotation: Chain driven direct rotation by activating tilt gear within end cap assembly in turn actuating tilt rod and worm-and-spur gears in carrier trucks.
  - 3. Operating Components: Internally mounted heavy-duty extruded aluminum tilt rod, vane carriers, and other components required for proper performance and designed for smooth, quiet, trouble free operation.
  - 4. Pivot Mechanism: Geared for synchronous 180 degrees rotation of vanes and type of operation indicated.
  - 5. Louver Carriers: Metal carriers at fabric vanes, plastic carriers at PVC vanes with stainless steel trucks, equipped with linkages or other devices to ensure positive spacing of louver blades.
  - 6. Tilt Chain: Nickel plated brass beaded ball chain, minimum 1/8 inch (3 mm) diameter; locate at drawback side of units as indicated.
  - 7. Minimum louver overlap: 3/8 inch.
  - 8. Stack release to allow all louvers to be moved for window cleaning.
  - 9. Louver Hooks: Replaceable without disassemblig track.
- C. PVC Vanes: Integrally colored, extruded PVC; flat, 3-1/2 inches (80mm) wide, solid, curved.
  - 1. Thickness: 0.028 to 0.032 iinch (7 mm), minimum.
  - 2. Flammability: Comply with NFPA 701.
  - 3. Color: As selected by Architect from manufacturer's full range of colors.
  - 4. Texture: Smooth.
  - 5. Light and Privacy: Equivalent to Level Four (4) as defined herein.
- Brackets and Mounting Hardware: Heavy duty brackets for the mounting configuration and span indicated; provide manufacturer's standard L- bracket with clip for outside mounting and clip only for inside mounting.
- E. Valances: To match vane design and color.
  - Style: As selected by Architect from blind manufacturer's full selection.

## 2.03 FABRICATION

A. Field measure finished openings prior to ordering or fabrication.

- B. Fabricate blinds to fit openings within specified tolerances.
  - 1. Vertical Dimensions: Fill openings from head to sill with 1/2 inch (13 mm) space between bottom of vanes and finish floor.
  - 2. Horizontal Dimensions Inside Mounting: Fill openings from jamb to jamb.
- C. Dimensional Tolerances: Fabricate blinds to within plus/minus 1/8 inch (3 mm) of intended dimensions.

## **PART 3 EXECUTION**

## 3.01 EXAMINATION

- A. Do not start installation before openings are finished and all finishes have been completed; do not install until painting is completed.
- B. Examine finished openings for deficiencies that may preclude satisfactory installation.
- C. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
- D. Start of installation shall be considered acceptance of substrates.
- E. Field measure finished openings prior to ordering or fabrication.

## 3.02 PREPARATION

- A. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
- B. Coordinate the work with window installation and placement of concealed blocking to support blinds.
- C. Install louver blinds in combination with roller shades from Section 12 24 40 at locations indicated on Drawings.

## 3.03 INSTALLATION

- Install in accordance with manufacturer's instructions using mounting style as indicated.
- B. Installation Tolerances:
  - Maximum Offset From Level: 1/16 inch (1.5 mm).
- C. Adjust blinds for smooth operation.
- D. Replace blinds that exceed specified dimensional tolerances at no extra cost to Owner.

## 3.04 CLEANING

Clean installed work to like-new condition.

#### 3.05 PROTECTION

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

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## SECTION 12 24 00 WINDOW SHADES

## **PART 1 GENERAL**

## 1.01 SECTION INCLUDES

Window shades and accessories.

## 1.02 RELATED REQUIREMENTS

- A. Applicable provisions of Division 1 shall govern the work of this section.
- B. Section 12 21 16 Vertical Louver Blinds

#### 1.03 DEFINITIONS

- A. Light and Privacy Scale:
  - Level One (1): Reduces glare and still reveals considerable details to the outside, provides no privacy.
  - 2. Level Two (2): Softens the light and still reveals some details to the outside. Provides moderate privacy.
  - 3. Level Three (3): Softens the light but reveals shadow-like outlines to the outside, provides substantial privacy.
  - 4. Level Four (4): Diffuses the light and reveals no shape or details to the outside. Provides complete privacy and room-darkening options.
  - 5. Level Five (5): Blocks virtually all the light and provides the most privacy and light control available.

### 1.04 REFERENCE STANDARDS

- ASTM G21 Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi; 2015.
- B. NFPA 701 Standard Methods of Fire Tests for Flame Propagation of Textiles and Films; 2015.
- C. WCMA A100.1 Safety of Corded Window Covering Products; Window Covering Manufacturers Association; 2014. (ANSI/WCMA A100.1)

## 1.05 SUBMITTALS

- A. See Section 01 30 00 Administrative Requirements, for submittal procedures.
- B. Product Data: Provide manufacturer's standard catalog pages and data sheets including materials, finishes, fabrication details, dimensions, profiles, mounting requirements, and accessories.
- C. Selection Samples: Include fabric samples in full range of available colors and patterns.
- D. Warranty: Submit sample of manufacturer's warranty and documentation of final executed warranty completed in Owner's name and registered with manufacturer.

## 1.06 DELIVERY, STORAGE, AND HANDLING

- A. Deliver shades in manufacturer's unopened packaging, labeled to identify each shade for each opening.
- B. Handle and store shades in accordance with manufacturer's recommendations.

## 1.07 WARRANTY

- A. See Section 01 78 00 Closeout Submittals, for additional warranty requirements.
- B. For window shade products provide a 25 year non-prorated warranty from date of substantial completion.

## **PART 2 PRODUCTS**

## 2.01 MANUFACTURERS-ROOM DARKENING SHADES (SINGLE SOURCE WITH SECTION 12 21 16)

- A. Hunter Douglas: www.hunterdouglas.com.
- B. C & G Custom Blinds, Black River Falls, 715-284-4800
- C. Levolor Contract: www.levolorcontract.com.
- D. Graber, Division of Springs Industries, Inc: www.graberblinds.com.
- E. The Blindman Commercial. www.theblindmancommercial.com
- F. SWF Contract Shading Systems: www.swfcontract.com

- G. Wisconsin draperies; www.wiscdrapery.com
- H. Substitutions: See Section 01 60 00 Product Requirements.

## 2.02 WINDOW SHADE APPLICATIONS

- A. Shades: Blackout shades.
  - 1. Type: Roller shades.
  - 2. Mounting: Inside (between jambs) behind vertical louver blinds.
  - Operation: Manual.

### 2.03 ROLLER SHADES

- A. Roller Shades: Fabric roller shades complete with mounting brackets, roller tubes, hembars, hardware and accessories; fully factory-assembled.
  - 1. Drop: Regular roll.
  - 2. Size: As indicated on drawings.
- B. Fabric: Vinyl impregnated base, 12 ounce minimum, non-flammable, color-fast, impervious to heat and moisture, and able to retain its shape under normal operation.
  - 1. Blackout Shades: Light and Privacy Scale-Level 5...
  - 2. Flammability: Pass NFPA 701 large and small tests.
  - 3. Fungal Resistance: No growth, tested to ASTM G21.
  - 4. Double-needle Stitching: Both hems shall be double needle stitched and backstitched for added strength. All hems turned to match color of shade, both inside and out.
- C. Roller Tube: As required for type of operation, extruded aluminum with end caps.
  - 1. Fabric Attachment: Utilize double sided adhesive tape.
- D. Hembars and Hembar Pockets: Wall thickness designed for weight requirements and adaptation to uneven surfaces, to maintain bottom of shade straight and flat.
  - Style: Thermally sealed fabric pocket covering rectangular aluminum hembar.
- E. Spring Roller Operation: Institutional quality steel construction, size as needed, 1-1/4 inch diameter minimum, with heavy duty torsion spring.

## 2.04 ACCESSORIES

- A. Brackets and Mounting Hardware: As recommended by manufacturer for mounting configuration and span indicated.
- B. Fasteners: Non-corrosive, and as recommended by shade manufacturer.

## 2.05 FABRICATION

- A. Field measure finished openings prior to ordering or fabrication.
- B. Fabricate shades to fit openings within specified tolerances.
  - 1. Vertical Dimension: Provide 12" of shade on roller when pulled below window sill.
  - 2. Horizontal Dimensions Inside Mounting: Provide symmetrical light gaps on both sides of shade not to exceed 0.25 inches (6 mm) total.
  - 3. Horizontal Dimensions Outside Mounting: Cover window frames, trim, and casings completely.

## **PART 3 EXECUTION**

## 3.01 EXAMINATION

- A. Examine finished openings for deficiencies that may preclude satisfactory installation.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
- C. Start of installation shall be considered acceptance of substrates.

## 3.02 PREPARATION

- A. Prepare surfaces using methods recommended by manufacturer for achieving best result for substrate under the project conditions.
- B. Coordinate with window installation and placement of concealed blocking to support shades.
- C. Install roller shades in combination with vertical louver blinds from Section 12 21 16 at locations indicated on Drawings.

## 3.03 INSTALLATION

- A. Install in accordance with manufacturer's instructions and approved shop drawings, using mounting devices as indicated.
- B. Installation Tolerances:
  - 1. Inside Mounting: Maximum space between shade and jamb when closed of 1/16 inch (1.5 mm).
  - 2. Maximum Offset From Level: 1/16 inch (1.5 mm).
- C. Replace shades that exceed specified dimensional tolerances at no extra cost to Owner.
- D. Adjust level, projection and shade centering from mounting bracket. Verify there is no telescoping of shade fabric. Ensure smooth shade operation.

## 3.04 CLEANING

- A. Clean soiled shades and exposed components as recommended by manufacturer.
- B. Replace shades that cannot be cleaned to "like new" condition.



