

## **SECTION 12484 - FLOOR MATS AND FRAMES**

### ***PART 1 - GENERAL***

#### **1.1 SUMMARY**

- A. This Section includes the following:
  - 1. Roll-up aluminum-tread rail floor mats with plastic hinges.

#### **1.2 SUBMITTALS**

- A. Material Safety Data (MSD): MSD Sheets are required for all materials with detailed information on content, product safety, and potentially harmful characteristics. MSD Sheets shall be submitted by Contractor to the Architect for review prior to delivery or use of such materials on the project site. Product approval will depend, in part, upon meeting the environmental requirements of this specification, based upon MSD information submitted to the Architect for review.
- B. Product Data: Include manufacturer's specifications and installation instructions, construction details, material descriptions, dimensions of individual components and profiles, and finishes for each type of floor mat and frame specified.
- C. Shop Drawings: For floor mats and frames. Show assembly, joint locations, installation details, layout, plans, elevations, sections, details of patterns or designs, accessories, anchors, and attachments to other Work.
  - 1. Coordinate Shop Drawings showing oversized recess for deferred installation of frames with concrete work.
- D. Samples for Initial Selection: For each type of floor mat and frame indicated.
- E. Samples for Verification: 12-inch- square assembled sections of floor mats, frame members, and tread rails with selected tread surface showing each type of metal finish and color of exposed floor mats, tread rails, frames, and accessories required.
- F. Maintenance Data: For cleaning and maintaining floor mats to include in maintenance manuals.
- G. Products - Recycled Content: Provide certification from manufacturer on product's recycled content.

#### **1.3 QUALITY ASSURANCE**

- A. Accessibility Requirements: Comply with the Florida Accessibility Code for Building Construction, October 1997 Edition.

- B. Source Limitations: Obtain floor mats and frames through one source from a single manufacturer.

#### 1.4 PROJECT CONDITIONS

- A. Field Measurements: Verify blocked-out openings in floors by field measurements before fabrication and indicate measurements on Shop Drawings.

#### 1.5 COORDINATION

- A. Coordinate size and location of oversized recesses in concrete work to receive floor mats and frames. Defer frame installations until building enclosure is completed and related interior finish work is in progress. Concrete, reinforcement, and formwork requirements are specified in Division 3.
- B. Coordinate integral installation of recessed frames and anchors with placing of concrete slab so frames are positioned accurately.

### **PART 2 - PRODUCTS**

#### 1.6 WALK OFF MATS

- A. Manufacturer – Basis of Design: PediTred II; Construction Specialties, Inc.
  - 1. Inserts: Serrated aluminum.
- B. Other Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
  - 1. Balco, Inc.

#### 1.7 METAL FRAME MATERIALS

- A. Extruded Aluminum: ASTM B 221, alloy 6061-T6 or alloy 6063-T5, T6, or T52 as standard with manufacturer.

#### 1.8 CONCRETE FILL AND GROUT MATERIALS

- A. Provide concrete materials complying with Division 3 for grout and fill around and under recessed mats and frames that produce concrete equivalent in strength to cast-in-place concrete slabs. For concrete fill, adjust aggregate size to not exceed one-third fill thickness.

### 1.9 FABRICATION

- A. General: Where possible, verify sizes by field measurement before shop fabrication.
- B. Floor Mats: Shop fabricate units to greatest extent possible in sizes as indicated. If not otherwise indicated, provide single unit for each mat installation; do not exceed manufacturer's recommended maximum sizes for units that are removed for maintenance and cleaning. Where joints in mats are necessary, space symmetrically and away from normal traffic lanes. Miter corner joints in framing elements with hairline joints or provide prefabricated corner units without joints.
- C. Recessed Metal Mat Frames: Extruded aluminum, of size and style to fit floor mat type specified, for permanent recessed installation, complete with corner pins or reinforcement and anchorage devices.
  - 1. Fabricate edge-frame members in single lengths or, where frame dimensions exceed maximum available lengths, provide minimum number of pieces possible, with hairline joints equally spaced and pieces spliced together by straight connecting pins.

### 1.10 FINISHES, GENERAL

- 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.

### 1.11 ALUMINUM FINISHES

- A. Finish designations prefixed by AA comply with the system established by the Aluminum Association for designating aluminum finishes.
- B. Class I, Clear Anodic Finish: AA-M12C22A41 (Mechanical Finish: nonspecular as fabricated; Chemical Finish: etched, medium matte; Anodic Coating: Architectural Class I, clear coating 0.018 mm or thicker) complying with AAMA 611.

## **PART 3 - EXECUTION**

### 1.12 EXAMINATION

- A. Examine substrates, and floor conditions, and floor recesses for compliance with requirements for location, sizes, minimum recess depth, and other conditions affecting installation of floor mats and frames.

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

#### 1.13 INSTALLATION

- A. Install recessed mat frames to comply with manufacturer's written instructions. Set mat tops at height recommended by manufacturer for most effective cleaning action; coordinate top of mat surfaces with bottom of doors that swing across mats to provide clearance between door and mat.
  1. For installation in terrazzo flooring areas, provide allowance for grinding and polishing of terrazzo without grinding surface of recessed frames. Coordinate with other trades as required.
  2. Install necessary shims, spacers, and anchorages for proper location and secure attachment of frames.
  3. Install grout and fill around frames and, if required to set mat tops at proper elevations, in recesses under mats. Finish grout and fill smooth and level.

#### 1.14 PROTECTION

- A. After completing frame installation and concrete work, provide temporary filler of plywood or fiberboard in recesses and cover frames with plywood protective flooring. Maintain protection until construction traffic has ended and Project is near Substantial Completion.
- B. Defer installation of floor mats until Project is near Substantial Completion.

END OF SECTION 12484

## **SECTION 12491 - HORIZONTAL LOUVER BLINDS**

### ***PART 1 - GENERAL***

#### **1.1 SUMMARY**

- A. This Section includes the following types of blinds and accessories:
  - 1. Mini-blinds with aluminum louver slats.

#### **1.2 DEFINITIONS**

- A. Mini-blind: Blind with nominal 1-inch- wide louver slat.

#### **1.3 SUBMITTALS**

- A. Material Safety Data (MSD): MSD Sheets are required for all materials with detailed information on content, product safety, and potentially harmful characteristics. MSD Sheets shall be submitted by Contractor to the Architect for review prior to delivery or use of such materials on the project site. Product approval will depend, in part, upon meeting the environmental requirements of this specification, based upon MSD information submitted to the Architect for review.
- B. Product Data: For each type of product indicated. Include styles, material descriptions, construction details, dimensions of individual components and profiles, features, finishes, and operating instructions.
- C. Shop Drawings: Show location and extent of horizontal louver blinds. Include elevations, sections, details, and dimensions not shown in Product Data. Show installation details, mountings, attachments to other Work, operational clearances, and relationship to adjoining work.
- D. Samples for Initial Selection: For each colored component of each type of horizontal louver blind indicated.
  - 1. Include similar Samples of accessories involving color selection.
- E. Samples for Verification: For the following products, prepared on Samples from the same material to be used for the Work.
  - 1. Louver Slat: Not less than 12 inches long.
  - 2. Tapes: Full width, not less than 6 inches long.
  - 3. Horizontal Louver Blind: Full-size unit, not less than 16 inches wide by 24 inches long.
  - 4. Valance: Full-size unit, not less than 12 inches wide.

- F. Window Treatment Schedule: Include horizontal louver blinds in schedule using same room designations indicated on Drawings.
- G. Product Certificates: For each type of horizontal louver blind product, signed by product manufacturer.
- H. Product Test Reports: For each type of horizontal louver blind product.
- I. Maintenance Data: For horizontal louver blinds to include in maintenance manuals. Include the following:
  - 1. Methods for maintaining horizontal louver blinds and finishes.
  - 2. Precautions about cleaning materials and methods that could be detrimental to finishes and performance.
  - 3. Operating hardware.
- J. Products - Recycled Content: Provide certification from manufacturer on product's recycled content.

#### 1.4 QUALITY ASSURANCE

- A. Source Limitations: Obtain horizontal louver blinds through one source from a single manufacturer.
- B. Fire-Test-Response Characteristics: Provide horizontal louver blinds with the fire-test-response characteristics indicated, as determined by testing identical products per test method indicated below by UL or another testing and inspecting agency acceptable to authorities having jurisdiction:
  - 1. Flame-Resistance Ratings: Passes NFPA 701.
- C. Corded Window Covering Product Standard: Provide horizontal louver blinds complying with WCMA A 100.1.

#### 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver blinds in factory packages, marked with manufacturer and product name, and location of installation using same room designations indicated on Drawings and in a window treatment schedule.

#### 1.6 PROJECT CONDITIONS

- A. Environmental Limitations: Do not install horizontal louver blinds until construction and wet and dirty finish work in spaces, including painting, is complete and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.

- B. Field Measurements: Where horizontal louver blinds are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication and indicate measurements on Shop Drawings. Allow clearances for operable glazed units' operation hardware throughout the entire operating range. Notify Architect of discrepancies. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

## **PART 2 - PRODUCTS**

### 1.7 HORIZONTAL LOUVER BLINDS, ALUMINUM LOUVER SLATS

- A. Product and Manufacturer – Basis of Design: 1" Mark 1 Levolor Blind w/ shearview slats; Levolor Contract; a Newell Company; Levolor.
  - 1. Color: White.
- B. Mounting: As indicated on Drawings, mounting permitting easy removal and replacement without damaging blind or adjacent surfaces and finishes; with spacers and shims required for blind placement and alignment indicated.
  - 1. Provide intermediate support brackets if end support spacing exceeds spacing recommended by manufacturer for weight and size of blind.

## **PART 3 - EXECUTION**

### 1.8 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances, operational clearances, accurate locations of connections to building electrical system, and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.

### 1.9 HORIZONTAL LOUVER BLIND INSTALLATION

- A. Install blinds level and plumb and aligned with adjacent units according to manufacturer's written instructions, and located so exterior louver edges in any position are not closer than 1 inch to interior face of glass. Install intermediate support as required to prevent deflection in headrail. Allow clearances between adjacent blinds and for operating glazed opening's operation hardware, if any.

### 1.10 ADJUSTING

- A. Adjust horizontal louver blinds to operate smoothly, easily, safely, and free from binding or malfunction throughout entire operational range.

### 1.11 CLEANING AND PROTECTION

- A. Clean blind surfaces after installation, according to manufacturer's written instructions.
- B. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and Installer that ensure that horizontal louver blinds are without damage or deterioration at time of Substantial Completion.
- C. Replace damaged blinds that cannot be repaired, in a manner approved by Architect, before time of Substantial Completion.

END OF SECTION 12491

## **SECTION 12494 - ROLLER SHADES**

### ***PART 1 - GENERAL***

#### **1.1 SUMMARY**

- A. This Section includes manually operated roller shades.
  - 1. Location: Refer to the Daylighting Control Schedule.

#### **1.2 SUBMITTALS**

- A. Material Safety Data (MSD): MSD Sheets are required for all materials with detailed information on content, product safety, and potentially harmful characteristics. MSD Sheets shall be submitted by Contractor to the Architect for review prior to delivery or use of such materials on the project site. Product approval will depend, in part, upon meeting the environmental requirements of this specification, based upon MSD information submitted to the Architect for review.
- B. Product Data: For each type of product indicated. Include styles, material descriptions, construction details, dimensions of individual components and profiles, features, finishes, and operating instructions.
- C. Shop Drawings: Show location and extent of roller shades. Include elevations, sections, details, and dimensions not shown in Product Data. Show installation details, mountings, and attachments to other Work, operational clearances, and relationship to adjoining work.
- D. Coordination Drawings: Reflected ceiling plans drawn to scale and coordinating penetrations and ceiling-mounted items. Show the following:
  - 1. Ceiling suspension system members and attachment to building structure.
  - 2. Ceiling-mounted or penetrating items including light fixtures; air outlets and inlets; speakers; sprinklers; recessed shades; and special moldings at walls, column penetrations, and other junctures of acoustical ceilings with adjoining construction.
  - 3. Shade mounting assembly and attachment.
  - 4. Size and location of access to shade operator and adjustable components.
- E. Samples for Initial Selection: For each colored component of each type of roller shade indicated.
  - 1. Include similar Samples of accessories involving color selection.

- F. Samples for Verification:
  - 1. Complete, full-size operating unit not less than 16 inches wide for each type of roller shade indicated.
  - 2. For the following products:
    - a. Shade Material: Not less than 12-inch- square section of fabric, from dye lot used for the Work, with specified treatments applied. Show complete pattern repeat. Mark top and face of material.
    - b. Valance: Full-size unit, not less than 12 inches long.
- G. Window Treatment Schedule: Include roller shades in schedule using same room designations indicated on Drawings.
- H. Product Certificates: For each type of roller shade product, signed by product manufacturer.
- I. Product Test Reports: For each type of roller shade product.
- J. Qualification Data: For Installer.
- K. Maintenance Data: For roller shades to include in maintenance manuals. Include the following:
  - 1. Methods for maintaining roller shades and finishes.
  - 2. Precautions about cleaning materials and methods that could be detrimental to fabrics, finishes, and performance.
  - 3. Operating hardware.
- L. Products - Recycled Content: Provide certification from manufacturer on product's recycled content.

### 1.3 QUALITY ASSURANCE

- A. Installer Qualifications: Fabricator of products.
- B. Installer Qualifications: An experienced installer who has completed installation of roller shades similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.
- C. Source Limitations: Obtain roller shades through one source from a single manufacturer.

- D. Fire-Test-Response Characteristics: Provide roller shade band materials with the fire-test-response characteristics indicated, as determined by testing identical products per test method indicated below by UL or another testing and inspecting agency acceptable to authorities having jurisdiction:
  - 1. Flame-Resistance Ratings: Passes NFPA 701.
- E. Corded Window Covering Product Standard: Provide roller shades complying with WCMA A 100.1.
- F. Mockups: Build mockups to verify selections made under sample Submittals and to demonstrate aesthetic effects and qualities of materials and execution.
  - 1. Build mockups in the location and of the size indicated or, if not indicated, as directed by Architect.
  - 2. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

#### 1.4 DELIVERY, STORAGE, AND HANDLING

- A. Deliver shades in factory packages, marked with manufacturer and product name, fire-test-response characteristics, and location of installation using same room designations indicated on Drawings and in a window treatment schedule.

#### 1.5 PROJECT CONDITIONS

- A. Environmental Limitations: Do not install roller shades until construction and wet and dirty finish work in spaces, including painting, is complete and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.
- B. Field Measurements: Where roller shades are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication and indicate measurements on Shop Drawings. Allow clearances for operable glazed units' operation hardware throughout the entire operating range. Notify Architect of discrepancies. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

### **PART 2 - PRODUCTS**

#### 1.6 MANUFACTURERS

- A. Manufacturer – Basis of Design: MechoShade Systems, Inc.

## 1.7 ROLLER SHADES

### A. Product Description:

1. Operation: Manual, with offset chain operator.

### B. Sunscreen Material: Fire resistant shade material.

1. Product and Manufacturer: Group 1310, fabric number 718, semi-translucent; Hexcel Fabrics.
2. Material Width: As required.
3. Bottom Hem: Straight.
4. Material Color: Refer to the Schedule.

### C. Rollers: Electro-galvanized or epoxy primed steel or extruded-aluminum tube of diameter and wall thickness required to support and fit internal components of operating system and the weight and width of shade band material without sagging; designed to be easily removable from support brackets; with manufacturer's standard method for attaching shade material. Provide capacity for one roller shade band per roller.

### D. Direction of Roll: Reverse, from front of roller.

### E. Mounting Brackets: Fascia end caps, fabricated from steel finished to match fascia or headbox.

### F. Fascia: L-shaped, formed-steel sheet or extruded aluminum; long edges returned or rolled; continuous panel concealing front and bottom of shade roller, brackets, and operating hardware and operators; length as indicated; removable design for access.

### G. Top/Back Cover: L shaped; material and finish to match fascia; combining with fascia and end caps to form a six-sided headbox enclosure sized to fit shade roller and operating hardware inside.

### H. Pocket-Style Headbox: U-shaped, formed-steel sheet or extruded aluminum; long edges returned or rolled; with a bottom cover consisting of slot opening of minimum dimension to allow lowering and raising of shade and a removable or openable, continuous metal access panel concealing shade roller, brackets, and operating hardware and operators within.

### I. Bottom Bar: Extruded aluminum, with plastic or metal capped ends. Provide exposed-to-view, external-type bottom bar with concealed weight bar as required for smooth, properly balanced shade operation.

### J. Shade Operation: Manual; with continuous loop bead chain, clutch, and cord tensioner and bracket lift operator.

1. Pull: Manufacturer's standard handgrip engaged pull.

2. Position of Operator: Left side of roller, as determined by hand of user facing shade from inside.
  3. Bead Chain: Stainless steel.
  4. Operating Function: Stop and hold shade at either fully open or fully closed positions only.
- K. Valance: As indicated by manufacturer's designation for style and color.
- L. Mounting: Inside mounting permitting easy removal and replacement without damaging roller shade or adjacent surfaces and finishes.

### 1.8 ROLLER SHADE FABRICATION

- A. Product Description: Roller shade consisting of a roller, a means of supporting the roller, a flexible sheet or band of material carried by the roller, a means of attaching the material to the roller, a bottom bar, and an operating mechanism that lifts and lowers the shade.
- B. Concealed Components: Corrosion-resistant-coated materials.
1. Lifting Mechanism: With permanently lubricated moving parts.
- C. Unit Sizes: Obtain units fabricated in sizes to fill window and other openings as follows, measured at 74 degrees F:
1. Shade Units Installed between (Inside) Jamb: Edge of shade not more than 1/4 inch from face of jamb. Length equal to head to sill dimension of opening in which each shade is installed.
  2. Shade Units Installed Outside Jamb: Width and length as indicated, with terminations between shades of end-to-end installations at centerlines of mullion or other defined vertical separations between openings.
- D. Installation Brackets: Designed for easy removal and reinstallation of shade, for supporting fascia, roller, and operating hardware and for hardware position and shade mounting method indicated.
- E. Installation Fasteners: Not fewer than two fasteners per bracket, fabricated from metal noncorrosive to shade hardware and adjoining construction; type designed for securing to supporting substrate; and supporting shades and accessories under conditions of normal use.
- F. Color-Coated Finish: For metal components exposed to view, apply manufacturer's standard baked finish complying with manufacturer's written instructions for surface preparation including pretreatment, application, baking, and minimum dry film thickness.
- G. Colors of Metal and Plastic Components Exposed to View: As selected by Architect from manufacturer's full range.

**PART 3 - EXECUTION**

1.9 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances, operational clearances, and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.

1.10 ROLLER SHADE INSTALLATION

- A. Install roller shades level, plumb, square, and true according to manufacturer's written instructions, and located so shade band is not closer than 2 inches to interior face of glass. Allow clearances for window operation hardware.

1.11 ADJUSTING

- A. Adjust and balance roller shades to operate smoothly, easily, safely, and free from binding or malfunction throughout entire operational range.

1.12 CLEANING AND PROTECTION

- A. Clean roller shade surfaces after installation, according to manufacturer's written instructions.
- B. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and Installer that ensure that roller shades are without damage or deterioration at time of Substantial Completion.
- C. Replace damaged roller shades that cannot be repaired, in a manner approved by Architect, before time of Substantial Completion.

END OF SECTION 12494