

**SECTION 12491 - HORIZONTAL LOUVER BLINDS****PART 1 - GENERAL**

## 1.1 RELATED DOCUMENTS

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

## 1.2 SUMMARY

- A. This Section includes the following types of venetian blinds and accessories
  - 1. Miniblinds with aluminum louver slats. Installed in all windows except Apartment windows.

## 1.3 DEFINITIONS

- A. Miniblind: Venetian blind with nominal 1-inch- wide louver slat.

## 1.4 SUBMITTALS

- A. 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.
- B. 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.
- C. 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.
- D. Window Treatment shall be provided for all exterior windows in all areas except in apartment units.
- E. Product Certificates: For each type of horizontal louver blind product, signed by product manufacturer.
- F. Product Test Reports: For each type of horizontal louver blind product.
- G. 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.

## 1.5 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 NFPA701.
- C. Corded Window Covering Product Standard: Provide horizontal louver blinds complying with WCMAA100.1.

#### 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver blinds 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.

#### 1.7 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 Designer of discrepancies. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

### **PART 2 - PRODUCTS**

#### 2.1 MANUFACTURERS

- A. Available 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. Horizontal Louver Blinds, Aluminum Louver Slats:
    - a. Hunter Douglas Window Fashions.
    - b. Levolor Contract; a Newell Company; Levolor.
    - c. Springs Window Fashions Division, Inc.; Bali or Graber.
    - d. Verosol USA, Inc.

#### 2.2 HORIZONTAL LOUVER BLINDS, ALUMINUM LOUVER SLATS

- A. Louver Slats: Aluminum, alloy and temper recommended by producer for type of use and finish indicated; with crowned profile and radiused corners.
  - 1. Nominal Slat Width: 1 inch for miniblinds.
    - a. Slat Spacing: Every 3/4 inch (18 mm) for 16.7 slats or more per foot .
  - 2. Nominal Slat Thickness: Not less than 0.008 inch .
  - 3. Slat Finish: No reflective, mat finish.

- B. Headrail/Valance: Decorative, integrated headrail/valance not requiring a separate valance or end brackets for finished appearance; formed steel or extruded aluminum; long edges returned or rolled; fully enclosing operating mechanisms on three sides and ends; capacity for one blinds per headrail, unless otherwise indicated on Drawings
- C. Bottom Rail: Formed-steel or extruded-aluminum tube, sealed with plastic or metal capped ends, with top contoured to match crowned shape of louver slat; with enclosed and protected ladders and tapes to prevent their contact with sill.
- D. Tilt Control: Consisting of enclosed worm gear mechanism, slip clutch or detachable wand preventing over rotation, and linkage rod, for the following operation:
  - 1. Tilt Operation: Manual with cord- or rod-operated tilter.
  - 2. Length of Tilt Control: Full length of blind.
  - 3. Tilt: Full.
- E. Lift Operation: Manual, cord lock; locks pull cord to stop blind at any position in ascending or descending travel.
- F. Tilt-Control and Cord-Lock Position: Right side and left side of headrail, respectively, unless otherwise indicated.
- G. Ladders: Evenly spaced to prevent long-term louver sag.
  - 1. For Blinds with Nominal Slat Width 1 Inch or Less: Braided string.
- H. Mounting: Position as indicated on Drawings. Manufacturer's standard mounting shall permit 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.
- I. Color: As selected by Designer from manufacturer's full range.

### 2.3 HORIZONTAL LOUVER BLINDS FABRICATION

- A. Product Standard and Description: Comply with AWCMA Document 1029, unless otherwise indicated, for each horizontal louver blind designed to be self-leveling and consisting of louver slats, rails, ladders, tapes, lifting and tilting mechanisms, cord, cord lock, tilt control, and installation hardware.
- B. Concealed Components: Noncorrodible or corrosion-resistant-coated materials.
  - 1. Lifting and Tilting Mechanisms: With permanently lubricated moving parts.
- C. Unit Sizes: Obtain units fabricated in sizes to fill window and other openings as follows, measured at 74 deg. F :
  - 1. Blind Units Installed between (Inside) Jambs: Width equal to 1/4inch per side or 1/2 inch total, plus or minus 1/8 inch , less than jamb-to-jamb dimension of opening in which each blind is installed. Length equal to 1/4inch , plus or minus 1/8 inch , less than head-to-sill dimension of opening in which each blind is installed.
  - 2. Blind Units Installed on Wall Surface: Width equal to 1/2 inch per side or 1 inch total, plus or minus 1/8 inch, wider than jamb-to-jamb dimension of opening for which each

blind is installed. Length as required to fully cover opening with mounting height at high point of arched head windows.

- a. Where multiple blinds are required to be mounted in series to cover wide openings, all blinds shall be mounted at same elevation, closely abutting each other to provide complete coverage of opening.
- D. Installation Brackets: Designed for easy removal and reinstallation of blind, for supporting headrail, valance, and operating hardware, and for hardware position and blind mounting method indicated.
- E. Installation Fasteners: Not fewer than two fasteners per bracket, fabricated from metal noncorrosive to blind hardware and adjoining construction; type designed for securing to supporting substrate; and supporting blinds and accessories under conditions of normal use.
- F. Color-Coated Metal Finish: For 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. Component Color: Provide rails, cords, ladders, and exposed-to-view metal and plastic matching or coordinating with slat color, unless otherwise indicated.

### **PART 3 - EXECUTION**

#### **3.1 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.

#### **3.2 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.

#### **3.3 ADJUSTING**

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

#### **3.4 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 Designer, before time of Substantial Completion.

**END OF SECTION 12491**