SECTION 12492 – Automated Roller Shade

Part I - General

## Scope

1. SUPPLIER: Furnish and Install Automated Roller Shades.
2. Related work specified elsewhere.
	1. Section 06: Rough Carpentry
	2. Section 08: Aluminum Windows
	3. Section 26: Electrical

## Submittals

1. PRODUCT DATA: Manufacturer’s descriptive literature shall be submitted indicating materials, finishes, construction & installation instructions, and verifying that product meets requirements specified. Manufacturer’s recommendations for maintenance and cleaning shall be included.
2. DRAWINGS AND DIAGRAMS: Wiring diagrams of any motorized components or units, working and assembly drawings shall be supplied as requested.
3. 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 hardware, instructions, and warranty.

## Quality Assurance

1. 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.
2. 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.
3. UNIFORMITY: Provide Motorized Roller Shades of only one manufacturer for entire project.

## Delivery, Storage, and Handling

1. Product shall be delivered to site in manufacturer’s original packaging.
2. Product shall be handled and stored to prevent damage to materials, finish, and operating mechanisms.
3. Handle and open boxes with care as to avoid cutting the shadeband or damaging the materials or operating mechanisms.

## Project/Site Conditions

(Before Product Installation Begins)

1. Prior to shade installation, building shall be enclosed; windows, frames, and sills shall be installed and glazed.
2. Wet work shall be complete and dry.
3. Ceilings, window pockets, electrical, and mechanical work above the product shall be complete.

## Warranty

A. Special Warranty for Motor and Control Systems: Manufacturer agrees to repair or replace motor and control units that are not free from defects in material and workmanship under normal and proper use within specified full warranty period, not prorated.

B. Warranty Period: Five years from date of manufacture.

# Part II - Products

## Acceptable Manufacturer

A. Subject to compliance with the requirements specified herein, the following manufacturer offering component products is to be incorporated into the work:

1. Hunter Douglas Architectural Window Coverings – 9900 Gidley St, El Monte, CA 91731; Phone 800.727.8953 x1; Website [hunterdouglasarchitectural.com](http://hunterdouglasarchitectural.com/) or architect approved equivalent.
2. Request for substitutions must be approved by architect minimum of 30 days prior to close of bid.
3. Find a representative: [http://www.hunterdouglasarchitectural.com/contacts/index.jsp#](http://www.hunterdouglasarchitectural.com/contacts/index.jsp)

## Motorized Roller Shades

1. PRODUCT: Hunter Douglas Basics Automated Roller Shades
2. MATERIALS:
	1. FABRICS: Inherently anti-static, flame retardant, fade and stain resistant, light filtering, room darkening, & blackout fabrics providing 0% - 15% openness factors. Fabric weights to range between 6.00 oz/ sq.yd. – 20.70 oz/sq.yd containing fiberglass, PVC, polyester, acrylic, vinyl laminates, cotton, & vinyl coatings. Finish selected by architect from manufacturer’s available contract colors.
	2. MOTORS:

A. AC Motors (Line Voltage): Shall be 4nm to 10nm with speeds of 30 to 38 RPM and lifting capacities of 32 - 80 lbs. Each motor shall be equipped with a thermal overload protector. Internal limits provide consistent upper and lower shade positions. Motors are UL approved and available in 110V AC

B. DC Motor (Low Voltage): Shall be 1.1nm to 4nm 12V DC, with option of a 2nm 24V DC with speeds of 25 to 28 RPM and lifting capacities of 7lbs to 35lbs. Internal limits provide consistent upper and lower shade positions. Motors are UL approved and available in DC (low voltage).

* 1. ROLLER: Tube shall be 55mm to 85 mm extruded aluminum, utilizing a LSE (Low Stress Energy) double sided- adhesive tape to secure the fabric without having to remove shade roller from shade brackets.
	2. IDLER: Heat stabilized fiber reinforced plastic gear with a galvanized steel shaft for wear resistance and smooth operation.
	3. HEMBAR: Extruded aluminum contoured, heat sealed and completely enclosed into a 2 inch pocket. Some fabrics may require external hembar.
	4. MOUNTING HARDWARE: Installation brackets shall be galvanized steel and can accommodate overhead, side and face mounting. Optional dual shade brackets shall hold two shades in one bracket assembly. Coupled shades shall be connected with a linking bracket mechanism.

7. ADDITIONAL OPTIONS AVAILABLE: Fascia, Side Channels, Sill Channels, Fabric Wrapped Hembar, Dual Shades, Coupled Shades, Extruded Pockets, Reverse Roll.

## Fabrication

**A.** Shade measurements shall be accurate to within +\_ 1/8 inch according to specifications established by Hunter Douglas engineering standards.

## Controls

1. CONTROL SYSTEM: Shall be adaptable to conform to all requirements of the owner on both installation and in the future.
2. CONTROL INPUTS: Shall vary, depending on the application and purpose. The switching device to activate the system will be either a switch for hardwire control, single or multi-channel radio control. Controls can be integrated with home automation or building management systems utilizing commonly used applications such as Serial – RS232 or RS485, Dry Contacts or Voltage Triggers.
3. AUTOMATIC INPUTS: Shall be generated from a variety of controls, including: Sun Sensors, Wind Sensors and Timers. Automated inputs have the capability to be over-ridden by either local controls or group controls.

Part III - Execution

## Inspection

**A.** Installer shall be responsible for inspection of jobsite, approval of mounting surfaces, verification of field measurements and installation conditions. Installation shall commence when satisfactory conditions are met.

## Installation

**A.** Install shades in accordance with manufacturer’s instructions including recommended support brackets and fasteners.

**B.** Install shades with adequate clearance to permit smooth operation of the shades. Demonstrate shades to be in smooth, uniform, working order.

## Cleaning

1. Clean shades with mild soap and water only. Do not use cleaning methods involving heat, bleach, abrasives or solvents. Do not use window cloths with paper content. Use of these methods will void the warranty.

End of Section