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#  SECTION 12492 – Manual Operated Dual Roller Shade

Part I - General

## Scope

1. SUPPLIER: Furnish and Install Dual Manual Roller Shades.
2. Related work specified elsewhere.
	1. Section 06100: Rough Carpentry
	2. Section 08520: Aluminum Windows

## 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 Dual Manual 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

1. Provide a limited manufacturer’s warranty from date of Substantial Completion covering the following periods.
2. Lifetime Limited Warranty on all hardware components, fabrics warrantied for 5 years by Hunter Douglas, and most fabrics warrantied for 10 years by the fabric manufacturer. Specific and custom product warranties available from manufacturer or its authorized agent.

# Part II - Products

## Acceptable Manufacturer

1. 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)

## Dual Manual Roller Shades

1. PRODUCT: Hunter Douglas RB Basics Dual Manual 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. CONTROL SYSTEM: Pulley clutch operating system of self- lubricating, uv stabilized fiberglass reinforced nylon construction and tempered high carbon steel internal springs, designed for smooth, trouble-free operation, precise control, and uniform aesthetics. Adjustment free continuous qualified #10 stainless steel ball chain (110 lbs test).
	3. ROLLER: Circular-shaped extruded aluminum tubes with thicker wall & ribs provide additional strength while locking into place the clutch and end plug. 2 ½” outside diameter extruded tube to have a 0.09” wall thickness. 2” outside diameter extruded tube to have a 0.062” wall thickness. 1 ½” outside diameter extruded tube to have a 0.060” wall thickness and 1 ¼” outside diameter extruded tube to have .065” wall thickness providing strength & durability.
	4. SPRING-LOADED PIN END: UV Stabilized, self-lubricating nylon outside sleeve and center spring-loaded shaft providing bearing surfaces on which the roller tube rides ensuring smooth, wear-resistant operation and ease of installation. 100-pound capacity.
	5. HEMBAR: Extruded aluminum flat bar, heat sealed and completely enclosed into a 2 inch pocket. Some fabrics may require external hembar.
	6. MOUNTING HARDWARE: Manufacturer’s standard .07 inch nickel-plated, C1008/ 1010 cold rolled steel. End plug bracket shall have a lock down retainer device. Brackets are reversible for right or left-hand installation.

 7. ADDITIONAL OPTIONS AVAILABLE: 5 inch Fascia, Side Channels, Sill Channels, Motorization, Fabric Wrapped Hembar, 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.

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

1. Install shades in accordance with manufacturer’s instructions including recommended support brackets and fasteners.
2. Install shades with adequate clearance to permit smooth operation of the shades. Demonstrate shades to be in smooth, uniform, working order.

## Cleaning

**A.** 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