
Part 1 General

1.1 WORK INCLUDED

- .1 Provide chain operated interior roller shade system.
- .2 Provide one roller shade per glazing unit (see drawings for locations) complete with all related hardware to complete the installation to the locations indicated on drawings.
- .3 Roller shades shall be mounted on or within glazing frame.

1.2 QUALITY ASSURANCE

- .1 All work specified under this section supplied and installed entirely by one subcontractor using his own forces.
- .2 Install one complete operating sample with accessories on site for review by the Departmental Representative before proceeding with the remainder of the work.

1.3 SUBMITTALS

- .1 Submit detailed drawings showing all components, finishes and perimeter construction conditions, installation, controls, and all applicable dimensions in accordance with Section 01 33 00.
- .2 Submit duplicate samples of the specified shade fabric cloth of each colour and texture; minimum size 200 mm x 200 mm for review.
- .3 Submit duplicate samples of housing, trim roller tube, hem bar and operating hardware brackets for review.
- .4 Submit duplicate copies of operating and maintenance instructions including name and telephone number of local service company.

1.4 DELIVERY, STORAGE AND HANDLING

- .1 Do not deliver to site until areas to receive shades are completely finished, all walls and ceilings completed and painted.
- .2 Deliver materials in original protective wrappings or containers, with manufacturer's labels and sealed intact.
- .3 Handle and store materials according to manufacturer's recommendations, protecting materials and finishes from damages, marring of finishes or soiling.

Part 2 Products

2.1 MANUFACTURERS

- .1 Acceptable Manufacturers:

- .1 Altex.
- .2 Draper.
- .3 Hunter Douglas Contract.
- .4 Sun Glow.

2.2 MATERIALS

- .1 Single Roller Shade:
 - .1 Metal manual chain operator, shade tube assembly, roller shade brackets, bottom hem bar, jamb mounted wheel bracket for wheel, and fasteners shall be to manufacturer's standard published specifications.
 - .2 3% Open Fabric: Woven SG Sunscreen 3%; CS 101, 25% polyester yarn, 75% PVC fabric. Green Guard certified.
 - .3 Pattern and colour as selected by Departmental Representative from unrestricted range.
- .2 Dual Roller Shade:
 - .1 Metal manual chain operator, dual shade tube assembly, roller shade brackets, bottom hem bar, jamb mounted wheel bracket for wheel, and fasteners shall be to manufacturer's standard published specifications.
 - .2 Provide manufacturer's standard perimeter black-out accessories including fascia and side channels.
 - .3 Black-out Fabric: 100% polyester PVC free for black out; Green Guard certified.
 - .4 Pattern and colour as selected by Departmental Representative from unrestricted range.

Part 3 Execution

3.1 FABRICATION

- .1 Shading system components manufactured and assembled allowing for custom installation techniques to suit project requirements.
- .2 Finished assemblies shall be square, true to size and free from distortion, twist, or other defects that could affect their strength, operation or appearance.
- .3 Factory applied finished shall be uniform, smooth and without blemishes.
- .4 The fabric shall retain its shape, not be affected by moisture or heat, and shall be non-flammable.

3.2 INSPECTION / PREPARATION

- .1 Verify that all blocking and framing necessary to carry shade assembly hardware is a proper installation and secure.
- .2 Notify Departmental Representative in writing of any deficiencies in the work of other trades that would affect the window treatment system.

- .3 Make accurate measurements at the site before fabrication.
- .4 Check layout of glazing framing sections, spans, and loading capabilities.

3.3 INSTALLATION

- .1 Install shades in all exterior windows.
- .2 Install work by manufacturer's skilled tradesmen and install in strict accordance with manufacturer's recommendations.
- .3 All items installed, plumbed, squared, rigidly coupled and adequately anchored, maintaining uniformed clearances, accurate alignment levels, and parallel with the window plane to provide smooth operation without binding.
- .4 Fabric shall not travel sideways more than 3 mm in either direction.

3.4 ADJUSTING AND CLEANING

- .1 Adjust shades and operating components as required to ensure smooth and trouble-free operation without binding.
- .2 Adjust shade and shade cloth to hang flat without buckling or distortion.
- .3 Clean shades and exposed components.
- .4 Replace work which cannot be satisfactorily repaired, adjusted, or cleaned.

END OF SECTION