



MOR™ (Motorized Opaque Rollershade)



Part 1 General

1.01 Section Includes

- A. Motorized room darkening shades and hardware.

1.02 System Description

- A. Motor operated opaque rollershades via low voltage controls.

1.03 Submittals

- A. Product data: Submit five copies of manufacturers technical data and installations instructions.
- B. Samples: Submit three samples of each shade cloth with complete color swatch.
- C. Shop Drawings: Submit drawings of mechanical products with appropriate dimensions.

1.04 Quality Assurance

- A. The manufacturer of these products shall show a minimum of 20 years documented experience.
- B. The installer shall show a minimum of 3 years experience with these systems.

Part 2 Products

2.01 Manufacturers

- A. SOS™ “Sun Or Shade”, a division of Inside Outfitters, Inc.
5725 Avery Rd., Dublin, Ohio 43016
Ph: 800.742.3372, Fx: 877.880.3496, E: info@sos-shades.com

2.02 Materials

- A. Shade Fabrics: The fabric shall have a high degree of opacity for effective control of light. The fabric must have sufficient rigidity to insure straight hanging, resist curl, twist, bowing and distortion. It must be dimensionally stable and will not shrink or stretch. The color shall be selected from standard colors. All seams are to be heat-sealed. Sewing is not accepted. (Finishes: See Specification Section “OPAQUE FABRICS”)
 1. Vinyl: Opaque fabric shall be fiberglass base, double coated with vinyl plastic to a minimum total weight of 10 ounces per square yard to a maximum weight of 14 oz. per square yard depending on fabric specified.
 2. Flocke: Opaque fabric shall be 42% Fiberglass, 51% Acrylic, 7% Titanium Oxide + Cotton Flocked Backing; PVC free.
 3. BO 1260: Opaque fabric shall 100% fiberglass with Acrylic backing; PVC free.





4. BO 837: Opaque fabric shall be 100% Trevira with metallized backing; PVC free.
5. Obion: Room darkening fabric shall be 72% Fiberglass, 24%Acrylic, 4% cotton flocked backing; PVC free.
6. Trans 1277: Room darkening fabric shall be PVC free and halogen free, 100% fiberglass.
7. DimOut: Room darkening fabric shall be PVC free, 100% fiberglass with acrylic backing.
8. NON 875: Room darkening fabric shall be PVC free, 100% Trevira with metallized backing.

B. Tube: The fabric shades shall be mounted on to 2", 2 ½" or 3" diameter aluminum tube depending on the width of the shade and fabric chosen for the shade. Custom size tubes available when dictated by size of shade composition.

C. Motor Control Systems: All systems utilize a Somfy "**STARHEAD**" motor or group of motors, "*world's largest manufacturer of tubular motors*". Roundhead motors shall not be accepted due to increased light gap. All motors are thermally protected, totally enclosed and maintenance free. (SOMFY UL approved motors can be found in the following file numbers: E60495, E60888, E63714) Each Motor is selected appropriately to operate each shade based on size and weight. All systems utilize low voltage controls.

- Electrical requirements: 120V, one phase 60 hertz. Amp .7-1.8 depending on size of shade.

Choose System below:

1. **Simpple System**TM--This system is deemed "simpple" because it utilizes a reduced number of wires as compared with other systems. It also allows the end user to forgo any switches in lieu of a remote unlike any other system. Or the end user may choose to have a remote and a wall switch or just a wall switch, as was the option with most traditional motorized systems. This system allows the end user a maximum of five groups via an unlimited number of motors.
 - See wiring diagram labeled "Simpple System" for technical specifications.
2. **Smmart System**TM-- This system allows total building automation through integration of lighting, heating/cooling, sun sensors, timers, etc. with the shade system via a PC. This is an intelligent system that maximizes efficiencies with minimal human management necessary. It can be used to automate a single room or an entire building. The system can be installed as a stand-alone system or in conjunction with an integration software package if desired. As a stand-alone system the user has available four intermediate stop points to which can be used to maximize energy efficiencies and minimize glare. If the SmmartTM System is integrated with a LonWorksTM compatible automation system 254 intermediate stop points are available. These additional intermediate stop points can be tied into an additional software package called SuntrackerTM which can help reduce summer





cooling costs up 40%. This system also allows the user to redefine the groups at any time via the PC without rewiring any controls.

- See wiring diagram labeled “Smmart System” for technical specifications.

Options:

- a. Remote Control: allows control via a transmitter.
 - b. Sun Sensor: continually monitors sun intensity, triggering the control unit and motor to raise or lower the shades as needed.
 - c. Digital Timer: provides seven-day automatic control.
 - d. Individual Group Control: provides control of one or more motors in groups and/or individually from one or more locations. This system can be configured in a variety of ways, i.e. individual window control, floor control, total building control.
 - e. Group Control: permits low voltage control of up to four motors with one or more switches from one or more locations. This system does not have the capability of operating each motor individually. This system can be configured to allow floor control or total building control.
3. **GC System “Group Control”**—This system is ideal for situations where you want control of all shades in an area as one group. You can create building control via a switch utilizing sub groups by floors, facades or specific areas.
- See wiring diagram labeled “ GC System” for technical specifications.

Options:

- a. Remote Control
 - b. Sun Sensor
 - c. Digital Timer
 - d. Interface with centralized building automation or lighting system
4. **IGC System “Individual Group Control”**—This system allows the user to operate shades as a group or individually. This allows the user to have individual window control, floor control and total building control.
- See wiring diagram labeled “IGC System” for technical specifications.

Options:

- a. Remote Control
 - b. Sun Sensor
 - c. Digital Timer
 - d. Interface with centralized building automation or lighting system
5. **2-4-1 System**—This system allows two motors to be wired to one switch. It is ideal in situations where there are a maximum of two motors per room.
- See wiring diagram labeled “2-4-1 System” for technical specifications.





Options:

- a. Switch: Rocker, Toggle or Decorator
- D. Shade Mounting Brackets: Steel, 1/8” thick type as required to suit indicated mounting and necessary torque. Center bracket utilized as needed to suit span, shade weight and indicated mounting. Fascia brackets shall be painted to match Fascia color.
- E. Hembar: Shall be a continuous aluminum bar 1” X 3/16” with sufficient weight to allow the shade to close without buckling or sagging.
1. (Option): Exposed Hembar. This hembar is mounted on the exterior of the bottom hem of shade. It is constructed of extruded aluminum and is weighted to properly raise and lower the shade without buckling or sagging. (Finishes: See specification section “ACCESSORIES”, *Exposed Hembar* for color selection and detail.)
- F. Fascia System (Option): All fascia systems shall be prime painted with baked enamel utilizing the powder paint method to ensure an environmental friendly application. Wet paint method shall not be accepted. (Finishes: See Specification Section “ACCESSORIES”, *Fascia Systems* for color selection and detail.)
1. L-Angle Fascia: Fascia panels shall be made from extruded aluminum. Fascia face shall be 3”, 4”, or 7 ½ to accommodate shade roll. Fascia shall clip to brackets and snap easily into place. It shall be easily removed for any necessary maintenance.
- G. Pocket System (Option): This system allows the shade to be recessed into the ceiling. (Finishes: See Specification Section “ACCESSORIES”, *Pocket Systems* for color selection, size and details.)
1. Headbox/Closure Flap: An extruded aluminum box that is sized to completely conceal rollershade when the shade is in the open position. Shade shall recede into Headbox without rubbing. The “Closure Flap” is a removable closure to cover the roll.
 2. Headbox/Closure Flap—Ceiling Grid Support: An extruded aluminum box that is sized to completely conceal rollershade when the shade is in the open position. Shade shall recede into headbox without rubbing. The” Closure Flap” is a removable closure to cover the roll. Headbox provides 1 1/8” aluminum grid strip to support ceiling tile.
 3. Hook/Closure Flap Assembly: Extruded aluminum Hook is fastened to drywall pocket. Closure Flap hangs from hook to provide pocket closure.
 4. Hook/Closure Flap—Ceiling Grid Support: Extruded aluminum Hook attaches to drywall pocket with 1 1/8” aluminum grid strip to support ceiling tile, Closure Flap hangs from hook to provide pocket closure.

Part 3 Execution

3.01 Installation:





- A. Install the shades where shown on the contract drawings in accordance with printed instructions provided by the manufacturer, SOS Shade Systems or a modification as approved by the manufacturer.
- B. The shade fabric shall hang flat without buckling or distortion. The edge when trimmed, shall hang straight without curling or raveling. Unguided roller fabrics shall roll without shifting side ways more than 1/4" in either direction. Tolerance for brackets shall not exceed 3/4" on either side.
- C. Verify that all surfaces and openings are ready to receive the work. Do not commence the work until the installer verifies field measurements.
- D. Beginning the installation indicates the installer accepts the substrate.

3.02 Adjusting

- A. The system shall be adjusted and balanced by the installer for smooth operation. All completed shades will be operated in the presence of the owner or his representative.
- B. Instruct the owners or his representative as to the proper operating procedures and maintenance of the system.

