



## Roll-A-Shade

### Roller Window Shade – Specification Guide

With years of window shade manufacturing experience and a standard of excellence, Roll-A-Shade® has consistently been providing nationally ranked companies and architectural firms with innovative products, impeccable service and outstanding quality for over 30 years. Roll-A-Shade® offers complete project management from start to finish - all jobs are measured, manufactured, installed and serviced by Roll-A-Shade®, not a third party.

By continuously striving to provide the highest standards of service available through its trained technicians and customer service personnel, Roll-A-Shade® is committed to providing the highest quality window treatment solutions. With a fully trained architectural staff, the project management team can assist with blueprints, design specifications and submittals.

Leading the industry in technology, Roll-A-Shade® offers a wide range of motorized options including full building automation systems and sun-tracking systems. Roll-A-Shade® window treatments have been specified in all areas of commercial construction including the health care, hospitality, education, retail and restaurant industries. As the single source of contact from start to finish, Roll-A-Shade® prides itself on pairing impeccable products with unparalleled customer service. All products are assembled in the U.S.A.

Our trained staff is available to assist you with your specifications. They can be contacted at (888)245-5077 or send an email to [bids@rollashade.com](mailto:bids@rollashade.com).

## SECTION 12 24 13 - ROLLER WINDOW SHADES

### PART 1 - GENERAL

#### 1.1 SUMMARY

##### A. Section Includes:

1. Manually-operated interior roller shades.
2. Motor-operated interior roller shades [and control systems].

#### 1.2 RELATED SECTIONS

\*NOTE TO SPECIFIER: Edit list below to include only those related sections that apply to Project.

- A. Section 05 57 00 "Decorative Formed Metal" for pockets for window treatment.
- B. Section 06 10 00 "Rough Carpentry" for wood blocking for securing roller shades.
- C. Section 07 92 00 "Joint Sealants" for sealing the perimeters of channels for light-blocking shades.
- D. Section 09 51 13 "Acoustical Panel Ceilings" for pockets for window treatment.
- E. Division 26 sections for electrical power conductors, cables, and conduits for electrical service to motor-operated roller shades, conduit for low-voltage power and control wiring, and control devices and systems related to work of this Section.

#### 1.3 REFERENCES

\*NOTE TO SPECIFIER: Edit list below to include only those references that apply to Project.

- A. National Electrical Manufacturers Association (NEMA): [www.nema.org](http://www.nema.org):
  1. NEMA ICS 6 Industrial Control and Systems Enclosures
- B. National Fire Protection Association (NFPA): [www.nfpa.org](http://www.nfpa.org):
  1. NFPA 70 National Electrical Code
  2. NFPA 701 Standard Methods of Fire Tests for Flame Propagation of Textiles and Films
- C. Window Covering Manufacturers Association: [www.access-board.gov](http://www.access-board.gov):
  1. WCMA A 100.1 Safety of Corded Window Covering Products (ANSI)

- D. Lead Free: RoHS/Directive 2002/95/ED, US Consumer Product Safety Commission Section 101 and REACH (EC 1907/2006)
- E. GREENGUARD Environmental Institute Gold

#### 1.4 ADMINISTRATIVE REQUIREMENTS

- A. Pre-installation Conference: Conduct conference at Project site. Include representatives of Contractor, Owner, Architect, roller shade Installer, Installers of electrical connections, and others affecting or affected by the Work. Review the following:
  - 1. Requirements of Contract Documents.
  - 2. Requirements of shop drawings.
  - 3. Delivery, storage, and handling.
  - 4. Power and control wiring requirements for motor-operated roller shades.
- B. Coordination:
  - 1. Coordinate installation of roller shades with installation of wall construction and connections to building services.
  - 2. Coordinate installation of anchors and blocking indicated on roller shade shop drawings.

#### 1.5 ACTION SUBMITTALS

- A. Product Data: For each type of (roller shades) product indicated. Include styles, material descriptions, construction details, dimensions of individual components and profiles, features, finishes, and operating instructions.
- B. Shop Drawings: For roller shades.
  - 1. Provide plans, elevations, sections, product details, installation details, operational clearances, and relationship to adjacent work.
  - 2. Locations and requirements for recesses and attachments to other work, including general construction, anchorage methods and locations, and service connections and locations.
  - 3. Include diagrams for power, signal, and control wiring including dimensioned connection locations.
  - 4. Indicate locations for fabric selections when more than one type is required.
- C. Samples for Initial Selection: For each type and color of shade material.
  - 1. Include Samples of exposed accessories involving color selection.
- D. Samples for Verification: For each type of roller shade.

1. Shade Material: Not less than 8"x10" sample.
  2. Roller Shade: Full-size operating unit, not less than 16 inches (400 mm) wide by 36 inches (900 mm) long for each type of roller shade indicated.
  3. Installation Accessories: Full-size unit, not less than 10 inches (250 mm) long.
- E. Window Treatment Schedule: For roller shades. Use same designations indicated on Drawings.

#### 1.6 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified roller shade fabricator and Installer.
- B. Product Certificates: For each type of shade material.
- C. Product Test Reports: For each type of shade material, certifying compliance with requirements.
- D. Low-Emitting Product Certificate: For roller window shade fabric products specified to meet volatile organic emissions standards, submit GREENGUARD certification or comparable certification acceptable to Architect.
- E. Lead-Free Certification: For roller window shade fabric products specified to meet lead free standards, submit RoHS certification or comparable certification acceptable to Architect.

#### 1.7 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For roller shades, to include in maintenance manuals.
  1. Methods for maintaining roller shades and finishes.
  2. Precautions about cleaning materials and methods that could be detrimental to fabrics, finishes, and performance.

#### 1.8 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Obtain roller shades through one source from a single manufacturer with a minimum of 30 years' experience in manufacturing products comparable to those specified in this section.
- B. Installer Qualifications: Experienced Installer, trained and certified by manufacturer, who has completed at least five installations similar in material, design, and extent to that indicated for this Project with a record of successful in-service performance.
- C. Fire-Test response characteristics: Passes NFPA 701-99 small and large-scale vertical burn. Materials tested shall be identical to products proposed for use.
- D. Anti-Microbial Characteristics: "No Growth" per ASTM G 21, G 22, G 2180, results for fungi ATCC 9642, ATCC 9644, ATCC 9645, RITB 2101.

- E. Mockups: If architect requires, provide a mock-up of one roller shade assembly specified for evaluation of mounting, appearance and accessories.
  - 1. Locate mock-up in window designated by Architect.
  - 2. Do not proceed with remaining work until mock-up is accepted by architect.

#### 1.9 DELIVERY, STORAGE, AND HANDLING

- A. Do not deliver window shades until building is enclosed and construction within spaces which require shades is substantially complete.
- B. Deliver products in manufacturer's unopened, original, undamaged containers with all labels intact.
- C. All containers and shades to be labeled according to Window Shade Schedule
- D. All products to be stored in manufacturer's unopened packaging until site is ready for installation.

#### 1.10 PROJECT CONDITIONS

- A. Environmental Limitations: Install roller shades after finish work, including painting, is complete and ambient temperature and humidity conditions are maintained at levels indicated for Project when occupied for its intended use.

#### 1.11 WARRANTY

- A. Roller Shade Non-Electric Hardware: Manufacturer's standard non-depreciating twenty-five (25) year limited warranty. Chain to have manufacturer's standard, non-depreciating one (1) year limited warranty.
- B. Roller Shade Electrical Components: Electrical components, including plug-in and battery-powered motors, have Manufacturer's non-depreciating five (5) year warranty.
- C. Roller Shade Installation: One (1) year from date of Substantial Completion, not including scaffolding, lifts or other means to reach inaccessible areas.
- D. Roller Shade Fabric: Manufacturer's non-depreciating [ten] year limited warranty on fabrics installed on the interior. See Fabric Specification for specific fabric warranty.

### PART 2 - PRODUCTS

## 2.1 MANUFACTURERS

- A. Basis of Design: **Roll-A-Shade, Inc.**; 12101 Madera Way, Riverside, California, 92503  
Telephone: (951) 245-5077; Fax (951) 245-5075 Email: [Bids@rollashade.com](mailto:Bids@rollashade.com),  
[www.rollashade.com](http://www.rollashade.com)

## 2.2 ROLLER SHADE TYPES

**\*NOTE TO SPECIFIER: Retain one or more of the following Roller Shade Products.**

- A. Manual operating interior, chain driven, roller shades in all windows of rooms and spaces indicated on the Drawings.
1. Indicate Roller Shade Type: **[RS-X]**
- B. Manual operating interior, chain driven dual shade light-filtering and room darkening blackout roller shades, operating independently of each other in all windows of rooms and spaces indicated on the Drawings.
1. Indicate Roller Shade Type: **[RS-X]**
- C. Motorized interior roller shades in all windows of rooms and spaces indicated on the Drawings and related motor control systems.
1. Indicate Roller Shade Type: **[RS-X]**
- D. Motorized interior dual shade light-filtering and room darkening blackout roller shades, operating independently of each other, in all windows and spaces indicated on the Drawings and related motor control systems.
1. Indicate Roller Shade Type: **[RS-X]**
- E. Stationary shades in all windows of rooms and spaces indicated on the Drawings.
1. Indicate Roller Shade Type: **[RS-X]**

## 2.3 ROLLER SHADE COMPONENTS

- A. Rollers: Extruded aluminum or corrosion-resistant aluminum tubes sized to accommodate roller operating mechanisms and specified Shades without deflection. Equip with permanently-lubricated drive-end and idle-end assemblies configured to allow removal of Shades for servicing.
1. Direction of Shade Roll: **[Regular, from exterior face of roller] [Reverse, from interior face of roller]**.
  2. Shade-to-Roller Attachment: Manufacturer's standard method.
- B. Chain-and-Clutch Operating Mechanism: Continuous-loop bead chain and clutch that stops shade movement when bead chain is released; with upper and lower limit stops; permanently adjusted and lubricated.

1. Bead Chains: #10 qualified stainless-steel chain rated to 90 lbs. (41 kg) minimum breaking strength. Nickel plated chain shall not be accepted.
  - a. Loop Length: [Full length of roller shade] [As indicated on Drawings].
  - b. Chain-Tensioner Type: [Chain tensioner, jamb mounted] [Chain tensioner, sill mounted].
    - 1) Color: As selected by Architect from manufacturer's full range.
2. Indicate Roller Shade Type: [RS-X]
  - a.

C. Motorized Operating System:

1. Electrical Components, Devices, and Accessories: Listed and labeled per NFPA 70, by a qualified testing agency, and marked for intended location and application.
2. Electric Motor: Fabricator's standard roller-enclosed tubular motor, sized as required to operate roller shades indicated.

\*NOTE TO SPECIFIER: Retain one of more of the following motor control types.

3. Electric Motor Control:
  - a. 4-wire: standard motor with AC wired control.
    - 1) Motor Electrical Characteristics: [120-V AC, 60Hz].
    - 2) Power Cable: NEMA 5-15P; 120-V AC, 60Hz 4-conductor cable.
    - 3) Control Accessories: [Individual switch control] [Group control station]
  - b. Radio: intermediate motor with RF wireless control.
    - 1) Motor Electrical Characteristics: [120-V AC, 60Hz] [24-V DC] [12-V DC] [Solar-powered DC] [Battery-powered DC].
    - 2) Power Cable: NEMA 5-15P; 120-V AC, 60Hz 3-conductor cable.
    - 3) Control Accessories: [Wall switch control] [Handheld remote control] [Weather sensor control] [3<sup>rd</sup> party system control] [Timer control] [Tablet/Phone app control].
  - c. Intelligent: advanced motor with modular RS485 control.
    - 1) Electrical Characteristics: [120-V AC, 60Hz] [24-V DC].
    - 2) Power Cable: NEMA 5-15P; 120-V AC, 60Hz 3-conductor cable.
    - 3) Control Accessories: [Wall switch control] [Weather sensor automation] [3<sup>rd</sup> party system integration] [Phone/Tablet app Control].

- D. Mounting Hardware: [Extended] [Manufacturer's standard] brackets or endcaps, corrosion resistant and compatible with roller assembly, operating mechanism, installation accessories, and mounting location and conditions.

1. Bracket to be a minimum one sixteenth (1/16) in. (1.59mm) stamped steel, or heavier as required.
  2. Motorized Roller Shade Coupling Assemblies: Designed to join up to **[Four (4)]** inline rollers operated by one roller drive-end assembly.
    - a. Coupling Assembly to include indexable Couplers.
  3. Color: As selected by Architect from manufacturer's full range.
- E. Shade Bottom:
1. Hem Bar: Extruded aluminum. Hem bar to be sealed on both ends using impulse welder.
  2. Roll-A-Shade Bottom Rail: As selected by Architect from manufacturer's full range.
- F. Installation Accessories:
1. Front Fascia: Aluminum extrusion that conceals front and underside of roller and operating mechanism and attaches to roller endcaps without exposed fasteners.
    - a. Shape: L-Shaped
    - b. Height: Fabricator's standard height required to conceal roller and Shade assembly when shade is rolled up, but not less than **[3 inches (76 mm)] [height indicated on Drawings]**.
    - c. Color: As selected by Architect from manufacturer's full range.
    - d. Indicate Roller Shade Type: **[RS-X]**
  2. Shade Head box: Rectangular, extruded-aluminum enclosure including front fascia, top and back covers, endcaps, and removable bottom closure.
    - a. Height: Fabricator's standard height required to enclose roller and Shade assembly when shade is rolled up, but not less than **[3 inches (76 mm)] [height indicated on Drawings]**.
    - b. Shade Headbox to be **[recessed] [exposed]**.
    - c. Color: As selected by Architect from manufacturer's full range.
    - d. Indicate Roller Shade Type: **[RS-X]**
  3. Endcap Covers: To cover exposed endcaps.
    - a. Color: As selected by Architect from manufacturer's full range.
  4. Light-Blocking Shade Side Channels: Designed to eliminate light gaps at sides of shades. Provide side channels with Shade guides or other means of aligning Shades with channels at tops.



5. Light-Blocking Shade Bottom (Sill) Channel: Designed to eliminate light gaps at bottoms of closed shades.
6. Installation Accessories Color and Finish: As selected from manufacturer's full range.

## 2.4 ROLLER WINDOW SHADE FABRIC

### A. Light Filtering Fabrics

1. Roll-A-Shade Signature Series [1%, 3%, 5%, or 10%]: Openness Factor: Approximately [1%, 3%, 5%, or 10%]. Composition: 24% Polyester, 76% PVC. Fire Classification: California U.S. Title 19 (small scale), NFPA 701-2004 TM#1 (small scale). Bacterial and Fungal Resistance: ASTM G21. GREENGUARD Certified GOLD- Children & School Certified as a low emitting fabric. Manufacturer to supply GREENGUARD Children & School Certificate.
  - a. Available Patterns and Colors: 001 White/White, 003 White/Gray, 016 White/Linen, 914 black/black, 1241 Charcoal/Bronze, 906 Black/Dark Gray
2. SheerWeave Style 2000 (5%) by Phifer: Openness Factor: Approximately 5%. Composition: 37% Fiberglass, 63% Vinyl on Fiberglass. Fire Classification: California U.S. Title 19 (small scale) NFPA 701-2004 TM#1 (small scale), NFPA 101 (Class A Rating), UBC (Class 1), British Std. 5867 and NFPA 701 TM#2 (large scale). Bacterial and Fungal Resistance: ASTM E2180, ASTM G21, AATCC30 Part 3, ASTM D3273, includes Microban antimicrobial additives. GREENGUARD Children & School Certified as a low emitting fabric. Manufacturer to supply GREENGUARD Children & School Certificate.
  - a. Available Patterns and Colors: PO2 White, PO4 White/Bone, PO5 White/Platinum, QO5 Bone, QO6 Bone/Platinum, Q1O Bronze, VO4 Platinum, V21 Charcoal, V22 Charcoal/Gray, and V24 Charcoal/Chestnut
3. SheerWeave Style 2100 (10%) by Phifer: Openness Factor: Approximately 10%. Composition: 37% Fiberglass, 63% Vinyl on Fiberglass. Fire Classification: California U.S. Title 19 (small scale) NFPA 701-2004 TM#1 (small scale), NFPA 101 (Class A Rating), UBC (Class 1), British Std. 5867 and NFPA 701 TM#2 (large scale). Bacterial and Fungal Resistance: ASTM E2180, ASTM G21, AATCC30 Part 3, ASTM D3273, includes Microban antimicrobial additives. GREENGUARD Children & School Certified as a low emitting fabric. Manufacturer to supply GREENGUARD Children & School Certificate.
  - a. Available Patterns and Colors: PO2 White, PO4 White/Bone, PO5 White/Platinum, QO5 Bone, QO6 Bone/Platinum, Q1O Bronze, VO4 Platinum, V21 Charcoal, V22 Charcoal/Gray, and V24 Charcoal/Chestnut
4. E-Screen [1%, 3%, 5%, or 10%] by Mermet: Openness Factor: Approximately [1%, 3%, 5%, or 10%]. Composition: 36% Fiberglass/ 64% Vinyl. Fire Classification: California U.S. Title 19 (small scale), NFPA 701-10 TM#1 (small scale), CAN/ULC-S109-03 Small and Large Flame Test. Bacterial and Fungal Resistance: ASTM G21, ASTM E2180. GREENGUARD Certified GOLD- Children & School Certified as a low

emitting fabric. Manufacturer to supply GREENGUARD Children & School Certificate.

- a. Available Patterns and Colors: 002002 White/White, 002020 White/Linen, 002007 White/Grey, 00M122 Charcoal/Grey-Stone, 030001 Charcoal/Grey, 030071 Charcoal/Apricot, 030061 Charcoal/Cocoa, 030030 Charcoal/Charcoal

#### B. Room Darkening Fabrics

1. SheerWeave Style 7000 (Blackout) by Phifer: Openness Factor: Opaque. Composition: 100% Polyester with Acrylic Foamed Backing. Fire Classification: California U.S. Title 19 (small scale), NFPA 701-2004 TM #1 (small scale), British Standard 5867. Bacterial and Fungal Resistance: ASTM G21-96, AATCC 174 – 1998, Part II and III. GREENGUARD Children & School Certified as a low emitting fabric. Manufacturer to supply GREENGUARD Children & School Certificate.

- a. Available Patterns and Colors: P62 White, P63 Birch, P64 Sand, Q57 Wheat, V39 Graphite, V40 Onyx, V41 Canyon, U67 Canvas, U69 Cocoa, and Q58 Mushroom.

2. SheerWeave Style 7500 (Blackout) by Phifer: Openness Factor: Opaque. Composition: 100% Polyester with Acrylic Coating (PVC Free). Fire Classification: California U.S. Title 19 (small scale), NFPA 101 (Class A Rating), NFPA 701-2004 TM#1 (small scale), BS 5867 Part 2 Type B Performance, CAN/ULC-S 109-03 (large and small scale), IBC Section 803.1.1 (Class A Rating). Bacterial and Fungal Resistance: ASTM E2180 and ASTM G22. GREENGUARD Children & School Certified as a low emitting fabric. Manufacturer to supply GREENGUARD Children & School Certificate.

- a. Available Patterns and Colors: R13 Ice, R14 Coconut, R15 Loft, R16 Spirit, R17 Dune, R18 Starfish, R19 Stone, R20 Odyssey, R21 Orient, R22 Midnight, R99 Midnight x2 and S97 Orient x2

3. Avila Twilight (Blackout) by Mermet: Openness Factor: Opaque. Composition: 37.5% polyester/62.5% acrylic. Fire Classification: NFPA 701 TM#1; California US Title 19; CAN/ULC-S109-03 Small & Large Flame Test. Bacterial and Fungal Resistance: ASTM E2180. GREENGUARD Children & School Certified as a low emitting fabric. Manufacturer to supply GREENGUARD Children & School Certificate.

- a. Available Patterns and Colors: 000002 White, 000016 Chalk, 000017 Canvas, 000020 Linen, C00015 Khaki, 000014 Marine, 000101 Pewter, 030030 Charcoal, 006060 Black

## 2.5 ROLLER WINDOW SHADE UNIT FABRICATION

- A. Roller Window Shade Unit Sizes: Fabricate units in sizes required to fill openings in configuration indicated:

\*NOTE TO SPECIFIER: Retain one or more of the following as required for Project

1. Inside of Jamb Installation: Width and length equal to opening size less clearances recommended by manufacturer.
  2. Outside of Jamb Installation: Width and length as indicated, with terminations between shades of end-to-end installations at centerlines of defined vertical separations between openings.
- B. Shade Fabrication: Fabricate Shades without battens or seams to extent possible, except for the following conditions:
1. Railroaded Materials: Railroad material where material roll width is less than the required width of Shade and where indicated.

### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Examine roller window shade unit substrates with Installer for compliance with approved submittals and other conditions affecting performance of the Work.
- B. Verify locations of connections to building electrical system.
- C. Proceed with installation once unsatisfactory conditions have been corrected.

#### 3.2 PREPARATION

- A. Contractor shall clean Surfaces thoroughly prior to installation.
- B. Coordinate requirements for blocking and structural supports to ensure adequate means for installation of window shades.
- C. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

#### 3.3 INSTALLATION

- A. Install roller window shade units level, plumb, square, and aligned with adjacent units according to fabricator's written instructions.

\*NOTE TO SPECIFIER: Retain "Electrical Connections" paragraph if specifying motorized shades.

- B. Electrical Connections: Connect motor-operated roller window shade units to building electrical system.

- C. Roller Window Shade Unit Locations: [At exterior windows] [As indicated in window-covering schedule] [As indicated on Drawings].
- D. Adjust and balance roller shades to operate smoothly, easily, safely, and free from binding, tracking or malfunction throughout entire operational range.

#### 3.4 CLEANING AND PROTECTION

- A. Clean roller window shade unit surfaces, after installation, according to manufacturer's written instructions.
- B. Provide final protection and maintain conditions that ensure that roller window shade units are without damage at time of Substantial Completion.
- C. Protect installed products until completion of project.
- D. Replace damaged roller window shade units that cannot be repaired, before time of Substantial Completion.

#### 3.5 TRAINING

- A. Engage a manufacturer-authorized service representative to train Owner's maintenance personnel to adjust, operate and maintain manual roller shaded systems.
- B. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain motor-operated roller window shade units.

END OF SECTION