Solarity® Solar Shades









- Bring balance to your space by controlling light and temperature without sacrificing your view
- A range of fabrics and colors are available to satisfy almost any need; choose from solar screen, high performance, translucent, and blackout fabric options
- All fabric options may contribute to LEED credits in EAc1 and EQc7 due to their high energy performance and daylighting attributes
- Digitally printed shades are available; a great option for signage or to add visual interest or architectural impact

IPC.509/REV.1



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Suggested Specification

SECTION 122413 - ROLLER WINDOW SHADES

PART 1 - GENERAL

- 1.1 RELATED DOCUMENTS
- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- 1.2 SUMMARY
- A. Section Includes:
- Manually operated roller shades with single or double rollers
- 2. Motor-operated roller shades with single or double rollers
- 3. Fixed roller shades for skylights.
- B. Related Requirements:
- Section 061053 "Miscellaneous Rough Carpentry" for wood blocking and grounds for mounting roller shades and accessories.
- 1.3 ACTION SUBMITTALS
- A. Product Data: For each type of product.
- Include styles, material descriptions, construction details, dimensions of individual components and profiles, features, finishes, and operating instructions for roller shades.
- B. Shop Drawings: Show fabrication and installation details for roller shades, including fabric panel materials, their orientation to rollers, and their seam and batten locations.
- Motor-Operated Shades: Include details of installation and diagrams for power, signal, and control wiring.
- C. Samples: For each exposed product and for each color and texture specified, 10 inches (250 mm) long.
- D. Samples for Initial Selection: For each type and color of fabric panel material.
- Include Samples of accessories involving color selection.
- E. Samples for Verification: For each type of roller shade
- Fabric Panel Material: Not less than 10 inches
 (250 mm) square. Mark inside face of material if
 applicable.
- F. Roller-Shade Schedule: Use same designations indicated on Drawings.
- 1.4 INFORMATIONAL SUBMITTALS
- A. Qualification Data: For Installer.
- B. Product Certificates: For each type of fabric panel material, signed by product manufacturer.
- C. Product Test Reports: For each type of fabric panel material, for tests performed by manufacturer and witnessed by a qualified testing agency.
- 1.5 CLOSEOUT SUBMITTALS
- A. Maintenance Data: For roller shades to include in maintenance manuals.
- 1.6 MAINTENANCE MATERIAL SUBMITTALS
- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
- Roller Shades: Full-size units equal to 5 percent of quantity installed for each size, color, and fabric panel material indicated, but no fewer than one unit per size.
- 1.7 QUALITY ASSURANCE
- A. Installer Qualifications: Fabricator of products.

- B. Mockups: Build mockups to verify selections made under Sample submittals, to demonstrate aesthetic effects, and to set quality standards for materials and execution.
- Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
- Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.
- 1.8 DELIVERY, STORAGE, AND HANDLING
- A. Deliver roller shades in factory packages, marked with manufacturer, product name, and location of installation using same designations indicated on Drawings.
- 1.9 FIELD CONDITIONS
- A. Environmental Limitations: Do not install roller shades until construction and finish work in spaces, including painting, is complete and dry and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.
- B. Field Measurements: Where roller shades are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication and indicate measurements on Shop Drawings. Allow clearances for operating hardware of operable glazed units through entire operating range. Notify Architect of installation conditions that vary from Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

PART 2 - PRODUCTS

- 2.1 Section 016000 "Product Requirements." MANUFACTURERS
- A. Manufacturers: Subject to compliance with requirements, provide products by the following:
- a. Solarity by Inpro Corporation
- B. Source Limitations: Obtain roller shades from single source from single manufacturer.
- 2.2 MANUALLY OPERATED SHADES WITH SINGLE ROLLERS
- A. Chain-and-Clutch Operating Mechanisms: With continuous-loop bead chain and clutch comprised of multi-banded steel springs that stops shade movement when bead chain is released; permanently adjusted and lubricated.
- 1. Bead Chains: Manufacturer's standard
- a. Polyester Bead Chain Color: [Black] [Brown] [White] [Nickel] [Antique brass].
- b. Metal Chain Guide Color: [Black] [Brown] [White] [Nickel] [Antique brass].
- c. Clutch Color: [Vanilla] [Black].
- d. Clutch Holding Capacity: [8 pounds (3.6 kg)] [16 pounds (7.3 kg)] [24 pounds (10.9 kg)] [30 pounds (13.6 kg)].
- e. Loop Length: Full length of roller shade
- f. Limit Stops: Provide upper and lower ball stops.
- g. Chain-Retainer Type: [Child-safety metal chain guide] [Child-safety locking chain guide]
- Spring Lift-Assist Mechanisms: Manufacturer's standard for balancing roller-shade weight and lifting heavy roller shades.
- a. Provide for fabric panels that weigh more than 24 lb (10.9 kg) or for shades as recommended by manufacturer, whichever criteria are more stringent.

- B. Spring Operating Mechanisms: Roller contains spring sized to accommodate shade size indicated. Provide with positive locking mechanism that can stop shade movement at each half-turn of roller and with manufacturer's standard pull.
- C. Rollers: Corrosion-resistant steel or extrudedaluminum tubes of diameters and wall thicknesses required to accommodate operating mechanisms and weights and widths of fabric panels indicated without deflection. Provide with permanently lubricated drive-end assemblies and idle-end assemblies designed to facilitate removal of fabric panels for service.
- Roller Drive-End Location: Right side of inside face of shade, unless indicated otherwise on the drawings.
- Direction of Fabric Panel Roll: Regular, from back of roller.
- Fabric Panel-to-Roller Attachment: Manufacturer's standard method.
- a. Provide fabric panels not less than 12 inches (300 mm) longer than desired shade height to assure solid attachment to roller tube and ability to adjust panels in field without removing mounting brackets.
- D. Mounting Hardware: Brackets or endcaps, corrosion resistant and compatible with roller assembly, operating mechanism, installation accessories, and mounting location and conditions indicated.
- E. Roller-Coupling Assemblies: Coordinated with operating mechanism and designed to join up to three inline rollers into a multiband shade that is operated by one roller drive-end assembly.
- F. Fabric Panels:
- 1. Fabric Panel Material: [Light-filtering fabric] [Light-blocking fabric].
- Fabric Panel Bottom (Hem) Bar: Enclosed in hem pocket of fabric panel material, thermally sealed, not sewn.
- a. Bottom (Sill) Channel: With light seals and designed to eliminate light gaps at bottoms of shades when shades are closed.
- b. Color and Finish: As selected by Architect from manufacturer's full range.
- G. Installation Accessories:
- 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] [Curved] [Cassette]
- b. Height: Manufacturer's standard height required to conceal roller and fabric panel when shade is fully open, but not less than 3 inches (76 mm).
- c. Color options below apply only to L-shaped fascia.
- Color: [Bronze] [Black] [White] [Clear anodized]
 [Vanilla].
- d. Color options below apply only to curved and cassette fascia.
- 1) Color: [Fabric-wrapped] [Black] [White].
- Exposed Headbox: Rectangular, extrudedaluminum enclosure including front fascia, top and back covers and endcaps.
- Height: Manufacturer's standard height required to enclose roller and fabric panel when shade is fully open, but not less than height indicated on Draving.
- 3. Endcap Covers: To cover exposed endcaps.

