

Insolroll
WINDOW SHADING SYSTEMS



RADIANCE
Solar Screen
& Audio-Visual
Shades



www.insolroll.com



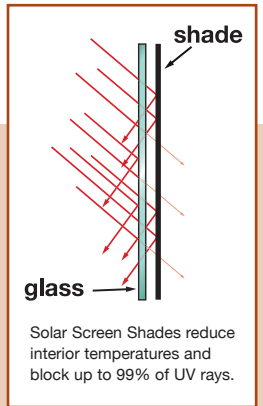
Light management...

*for today's lifestyles,
workplace and design*

Insolroll Window Shading Systems manufactures top quality solar screen shade and audio-visual shade systems.

- Over 25 years experience in the solar screen shade industry
- State-of-the-art manufacturing facility
- Interior, exterior, audio-visual, and dual shade applications
- North American Installation Network
- Comprehensive technical support
- Consultation services for project detailing and fabric selection
- Average lead-time 10 days or less

- *Live and work comfortably*
- *Block heat and glare while maintaining the view*
- *Protect valuable interiors*
- *Conserve energy*



“ The Insolroll Solar Screen Shades are perfect for our application. They eliminated our glare problem while allowing us to maintain beautiful mountain views.

Matt Hickey, Finance & Facility Services
North Boulder Recreation Center ”

Insolroll Solar Screen Shades were chosen by the North Boulder Recreation Center, A Silver LEED™ certified building in Boulder, Colorado. Designed with ample daylighting in order to reduce energy costs and allow a close connection with the outdoor environment, this application showcases the benefits of solar screen shades.

SOLAR SCREEN FABRICS

Solar Screen fabrics are designed to control light without eliminating it. Like sunglasses for your windows, solar screen fabrics reduce glare while allowing excellent view to the outside.

M Screen

- Vinyl-coated fiberglass
- 3% and 5% openness
- 1 X 2 weave pattern
- 122" wide goods available in 5% fabric
- 14 color choices

M Screen's unique weave pattern gives it a pleasing, linen-like appearance.



4000 Series

- Vinyl-coated polyester
- 1% to 10% openness
- 126" wide goods available in SW 4000 and SW 4400
- 9 color choices in SW4000/SW4100/SW4400, 8 color choices in SW 4800

Provides control of the sun regardless of the building exposure on the activity being performed.



E Screen

- Vinyl-coated fiberglass
- 5-10% openness
- 78" & 98" widths; 122" wide goods available in 5% openness
- 10 color choices

Woven in a 2 X 2 basketweave configuration to maximize clarity of view.



Fabric Properties

Density

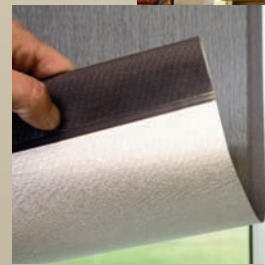
Woven to precise standards, our fabrics consist of polyester or fiberglass yarns with a vinyl coating and are woven in a range of density from 1% to 14%. Fabric density affects the amount of UV and glare protection, as well as the clarity of view.

Color

Light-colored fabrics provide more heat reduction and diffuse interior light.



Dark colored fabrics provide more glare reduction and better view-through.



SilverScreen's highly reflective surface creates a shading fabric that outperforms all others at reducing heat, controlling glare, and retaining view regardless of color choice.

Commercial Fabrics

Fabrics for commercial applications meet or exceed flame-retardance and bacterial/fungal-resistance requirements.

SPECIALTY SOLAR SCREEN FABRICS

Natural Weave SW 5000

- Vinyl-coated polyester with acrylic accents in some patterns
- 5–10% openness
- Available in 98" wide goods
- Diverse weave patterns
- 12 color/pattern choices

Solar Screen performance with the look and textures of natural shades



Superior heat and glare protection, with excellent view-through regardless of color choice

Audio Visual Fabrics

Insolroll offers a beautiful selection of opaque shade fabrics for audio-visual and home theater applications.

Fiberglass Blackout Fabric

- 14 oz. fiberglass
- 0% openness, providing total light blockage
- Standard 72" width; white available up to 120" width
- Black and Gray available in duplex fabric (white on reverse side)
- 8 color choices



Value-priced, durable, and easily cleaned... perfect for heavy-use areas

SW 7000

- Polyester with acrylic-foamed backing
- PVC Free
- 0% openness, providing total light blockage
- Available in 94" width
- 8 color choices

Room darkening with the look and feel of rich cloth



Flocké

- Fiberglass and acrylic, with cotton flocked backing
- 0% openness, providing total light blockage
- Available in 78" width
- 12 color choices



Premium quality blackout fabric featuring a lightly textured surface



SilverScreen™ High Performance Solar Screen Fabric

For applications requiring the highest possible shading coefficient

- Vinyl-coated fiberglass backed with an ultrafine layer of aluminum
- 5%(+/-) openness
- Available in 94" wide goods
- All colors provide glare reduction
- All colors provide superior view-through
- All colors provide reduction of heat-gain
- 6 color choices



Solar Screen Shades & Building "Green"

The contribution of solar screen shades to "Green" building projects and as requirement reference items in the Leadership for Energy and Environmental Design (LEED) rating system is evaluated based on:

1. Shading Performance

Solar Screen Shades aid in conserving energy, increasing thermal comfort and controlling heat and glare while maintaining connectivity to the outdoors.

2. Material Content

- Fabrics are available that are GreenGuard Indoor Air Quality Certified® (Sheerweave 2000 series).
- Fabrics are available that are PVC-Free (Vela, Terra and Sanctuary).
- Fabrics are available that are fully recyclable (Soltis 86 and Soltis 99).



AUDIO-VISUAL & DUAL SHADES

Expanding the possibilities and function of a room

Insolroll audio-visual and dual shade systems create the perfect environment for any business or entertainment event. Ideal for conference centers, schools, hospitals, home theaters, or any location which requires the elimination of light through windows.

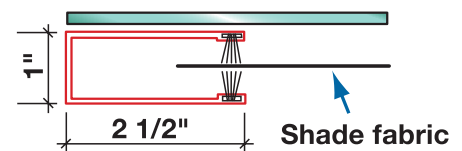


Dual Shades are created by combining the AV shade with a standard solar screen shade, providing both room darkening and ambient light control.

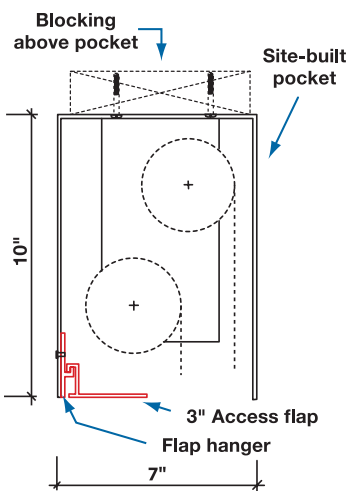
Accessories include:

- Fascia systems
- Access flap & hanger
- Extruded headbox* (4 3/4" X 5", for above-ceiling mounting)
- Side track (to eliminate light leakage)

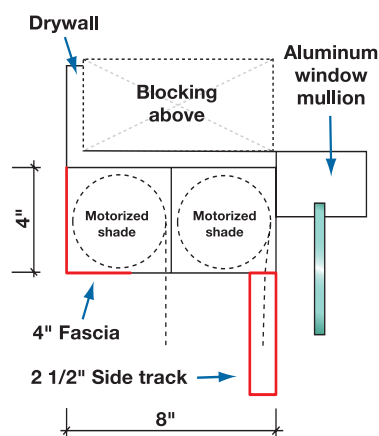
*Head detailing of a dual shade may require specially fabricated headbox; Insolroll Technical Support is available to assist with this detail at 800.447.5534.



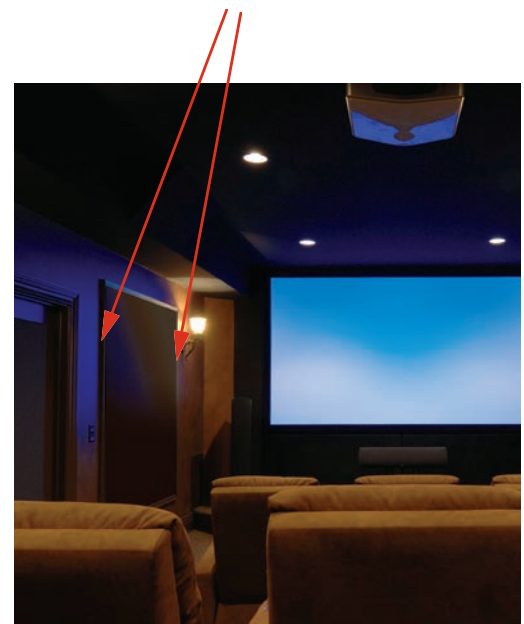
Side Track to prevent light leakage for Audio-Visual Applications



Dual Motorized Shades with site-built pocket (ceiling or pocket mount)



Dual Motorized Shades with Fascia and Side Track

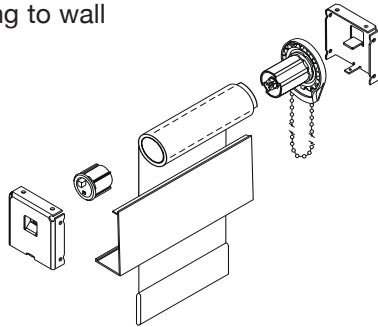


SHADE OPERATORS & ACCESSORIES

Clutch-operated Shades

An adjustment-free system controlled by a nickel-plated steel ball chain or a plastic bead chain on polyester cord. The clutch system is comprised of multi-banded steel springs that create the pressure necessary to keep the shade in the desired position.

- Smooth, easy to operate, economical roller shade operator
- Specified in two out of every three roller shade projects worldwide
- Universal one-piece mounting brackets for easy mounting to wall or ceiling

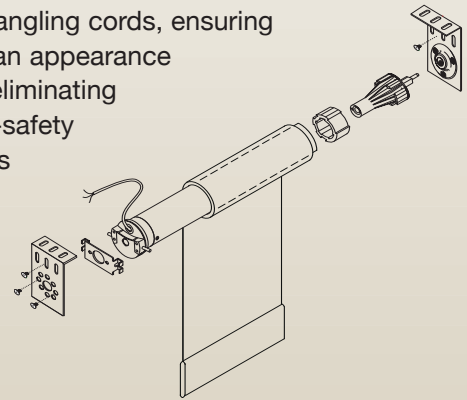


Clutch-operated shade, optional fascia shown

Motorized Shades

Featuring a 110 volt AC tubular-type directional motor designed for roller shade systems. Motor includes built-in limit and thermal overload switches. Convenient, efficient operation with any of Insolroll's Simplified Building Controls.

- Trouble-free operation of oversized or hard-to-reach shades
- Allows all shades in a group to operate in unison for a uniform appearance
- No dangling cords, ensuring a clean appearance and eliminating child-safety issues



Motorized shade, optional fascia not shown

Insolroll Accessories			
		Enhancements for your shade system	
3" or 4" Fascia System	Extruded Shade Pockets	Access Flap & Hanger for Site-built Pocket	Cassette-style Headbox
<p>Blocking above ceiling Drywall ceiling 3" or 4" Aluminum fascia 3" or 4" Aluminum fascia</p>	<p>Blocking above pocket Ceiling grid mounting angle 5" Aluminum pocket 3" Aluminum access flap Ceiling tile</p>	<p>Blocking above pocket Blocking beside pocket (3/4" plywood or 2x framing) Drywall pocket Drywall ceiling 3" Aluminum access flap Aluminum flap hanger</p>	<p>3 9/16" 3 9/16" Clutch or Motorized Shade 3 9/16" Cassette Hem bar with welded pocket</p>
3" or 4" Fascia, Universal Mount	5" or 5 5/8" Aluminum Ceiling Pocket	Access Flap & Hanger	3 9/16" Cassette, Painted or Fabric-wrapped

INSOLROLL SIMPLIFIED BUILDING CONTROLS (ISBC)

Custom control options for efficient operation of motorized shades

Insolroll Simplified Building Controls can operate a single shade with a simple three-position switch, or hundreds of motors with a fully automated control system.



Remote Control Operation

- Special Built-in radio remote control motors simplify wiring as the motors can be plugged into an outlet located near the head of the window.
- Remote switching provided by Hand-held Remote Control Transmitters, Wireless Wall-Mounted Switches, or Wireless Wall-Mounted Timers.

Remote control operation simplifies electrical wiring as it eliminates the need to run switch legs. Shades can be operated individually or in groups.

Wall Switch Operation

- Three-position switches (up/center off/down)
- Available in multiple styles and colors to match decor
- Special Keyed Switches available for locations where operation of shades is limited to authorized personnel.

Switch operation allows individual control for convenience of each office occupant or group control for operating all shades per exposure or building zone.



Automatic Control Operation

- Sun Controller can operate a single shade or all of the shades in a group. Adjustable light level intensity lowers shades only when there is too much sun.
- Twenty-four Hour Timer operates shades at preset times each day.

Automatic control maximizes the performance of shading products. The sun controller greatly increases energy performance as shades are automatically rolled down when direct sunlight is overheating the building. The timer assures consistent building appearance as shades can be timed to open and close together.



Building Automation System Operation

- Programmable motor controllers with bus line communications can be linked in any configuration and receive inputs via: Dry Contact, RS 232, Infrared Emitter, Internet Protocol System

Building control allows shades to be operated in concert with lighting, security, heating and air conditioning, or audio-visual system controls.



Quiet Motors

Insolroll "Quiet" Motors (IQM) represent a family of motorization products for window treatment applications that operate at extremely low noise levels. Insolroll features 110 volt AC and 24 volt DC motors with standard switching or built-in radio remote control switching options. When your application demands the window treatment operate in virtual silence, specify IQM by Insolroll.

SPECIFICATIONS

PART ONE: GENERAL

1.01 SECTION INCLUDED

- A. Insolroll 2000 Solar Screen Shades to be custom manufactured to conform with site requirements. Provide all accessories, attachment hardware, labor, and equipment necessary to complete installation of this section.

1.02 REFERENCES

- A. Flame retardant materials used shall meet the requirements of the National Fire Protection Association (NFPA) 701 Flame Test and California U.S., Title 19.

1.03 SUBMITTALS

- A. Submit manufacturer's descriptive literature indicating materials, finishes, construction and installation instructions and data verifying that the product meets requirements specified. Shop drawings to indicate all fasteners, installation methods and clearances at head, jamb, and sill for each mounting condition. Samples to be submitted in sizes no less than 12" in length for colored materials. Submit a sample of all exposed surfaces and accessories needed to complete the installation. Color samples to be submitted to the architect for selection. Submit all quality assurance documents relative to the installation, including design data, test reports, certificates issued by Underwriters Laboratory, manufacturer's instructions, manufacturer's installation instructions, and close-out submittal documents if available.

1.04 DELIVERY, STORAGE, AND HANDLING

- A. Deliver to project site in manufacturer's original packaging. Handle and store to prevent damage to materials, finishes, and operating mechanisms. All materials delivered to the site shall remain the property of the manufacturer until installation is complete and final payment is received.

1.05 PROJECT CONDITIONS

- A. Prior to any materials being installed, the building shall be enclosed. All interior finishes are to be completed and dry prior to any material installation.

1.06 SEQUENCING

- A. Installation of all materials included in this section to be coordinated and complete prior to furniture placement on floor surface.

1.07 WARRANTY

- A. Provide manufacturer's standard five (5) year limited warranty against defects in materials and workmanship, beginning at date of substantial completion.

PART TWO: PRODUCTS

2.01 MANUFACTURER:

- A. Insolroll Window Shading Systems
637 S. Pierce Ave.
Louisville, CO 80027
800.447.5534
Web: www.insolroll.com

- B. Product substitutions must be approved by architect prior to bid.

2.02 INSOLROLL SOLAR SCREEN SHADES/ INSOLROLL AUDIO-VISUAL SHADES/ INSOLROLL DUAL SHADES

- A. Insolroll shades are available with manual or motorized operation and a variety of solar screen or opaque shading fabrics. Dual shades combine a solar screen and opaque fabric. Accessories are available as suitable for application including side tracks for audio-visual shades to eliminate light leaks at shade edges.

2.03 MANUAL OPERATING SYSTEM

- A. Adjustment-free system shall be provided that is controlled by a nickel-plated, steel ball chain or plastic bead chain on polyester cord. The clutch system shall be comprised of multi-banded steel springs that create the pressure necessary to keep the shade in the desired position. Clutch to be adjustment-free and asymmetrical right- or left-handed installation.
- B. Mounting brackets to be single piece and able to be mounted to ceiling, wall, or side. Idler end bracket must have a lock down retainer device to secure shade in brackets.
- C. Roller tube shall be roll-formed steel or extruded aluminum. Roller tube to be sized appropriately to minimize deflection.
- D. Fabric to be attached to roller tube using two sided adhesive tape to allow for easy adjustment of fabric leveling and removal of fabric panel without removing brackets. No other method of attachment is acceptable.
- E. Bottom hem of shade to be RF heat-seal pocket with enclosed hem bar.

2.03.1 MOTORIZED OPERATING SYSTEM

- A. Motor shall be tubular-type mounted inside the shade tube and shall operate on 110 volts. Motor is to have a self-contained limit and thermal overload switch. Internal limits shall determine the full-up and full-down position of the shade.
- B. Insolroll's Simplified Building Control (SBC) is a performance based system providing efficient operation of Insolroll's motorized shading products. Specifier must identify scope of motorized shades and select method of control.

- 1. ISBC 1 Wall Switch Control
- 2. ISBC 2 Remote Control
- 3. ISBC 3 Automatic Control
- 4. ISBC 4 Building Automation Interface

2.04 SHADE ACCESSORIES

- A. Extruded aluminum 3" and 4" fascia snaps on to the mounting brackets to conceal the hardware mechanism on manual and motorized shades. 4" fascia is available in white, clear anodized, bronze, black and vanilla. 3" fascia is available in white, clear anodized, bronze, black, and vanilla.
- B. 5" or 5 5/8" extruded aluminum ceiling pocket with access flap
- C. Access flap with hanger is available for bottom closure of site-built pockets.
- D. Custom dual shade pocket to be fabricated per site requirements.
- E. Extruded aluminum side tracks

2.05 SOLAR SCREEN FABRICS

Fabric selection must consider building location, sun exposure, and type of activity being performed in the space. Fabric density and color affect performance. Contact Insolroll for consultation, sample cards, and large fabric samples.

- A. Phifer SheerWeave 4000 woven vinyl-coated polyester yarns (5% openness factor)
- B. Phifer SheerWeave 4100 woven vinyl-coated polyester yarns (10% openness factor)
- C. Phifer SheerWeave 4400 woven vinyl-coated polyester yarns (3% openness factor)
- D. Phifer SheerWeave 4800 woven vinyl-coated polyester yarns (1% openness factor)
- E. Phifer SheerWeave 5000 woven vinyl-coated polyester yarns (5-10% openness factor)
- F. 3G Mermet M-Screen woven vinyl-coated fiberglass yarns (3% or 5% openness factor)
- G. SilverScreen woven vinyl-coated fiberglass yarns (5% openness factor); for best possible thermal performance (heat reduction), Silver Screen consists of an ultra-fine layer of aluminum applied to exterior face of solar screen fabric.

2.06 OPAQUE FABRICS

- A. 14 Ounce Fiberglass audio-visual fabric
- B. 3G Mermet Flocké audio-visual fabric
- C. SheerWeave 7000 audio-visual fabric

Note: Additional Solar Screen and Opaque fabrics are available upon request.



637 S. Pierce Ave.
Louisville, CO 80027

tel: 800.447.5534
fax: 303.665.1209

www.insolroll.com
info@insolroll.com