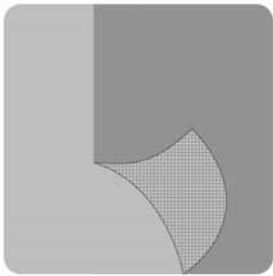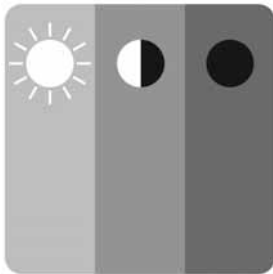# Envision Roller Shades Features

Fabrics

EcoGreen™

- PVC-free, fully recyclable fabrics may contribute toward LEED® certification.

- Good for the world and for you.

- Includes Strata, Terrene and Aurora fabric collections.

Energy Efficiency

- The ultra-fine layer of aluminum on SilverScreen™ fabrics combines visual comfort, view through and thermal comfort with dramatic solar energy performance.

- Refer to specifications on pages 17-21 for solar screen performance data.
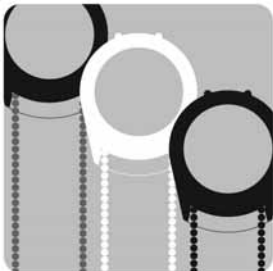
Light Control Choices

- Choices range from translucent to blackout.

- Refer to specifications on pages 17-21 for solar screen performance data. See the sample book swatches to experience the light control properties of every fabric.
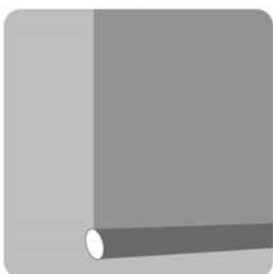
Hardware

Head Rail Options

- Standard Roller Head Rail is available with standard or reverse roll.

- Upgrade to Cassette, UltraSleek™ or motorization options for coordinated looks and easy operation.

Coordinating Colors

- White and black clutches and white, black and steel bead chains are available on the Standard Roller Head Rail.

- Steel bead chain features fabric coordinated clutches in white or black.

Fabric Wrapped Bottom Rail

- All Envision Shades feature the acclaimed fabric wrapped bottom rail for a tailored look.

- Bottom rails are white and black and are color matched to the bead chains and clutches on Envision Shades with Standard Head Rail.
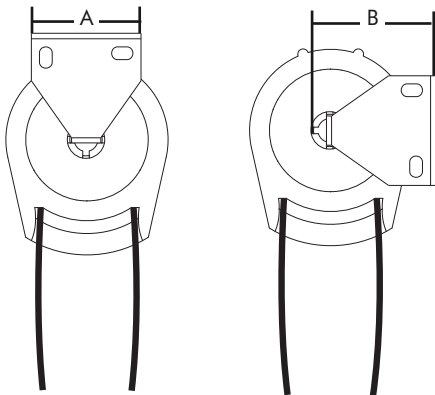
Envision Fabric Properties

Collection Name	Fabric Width (inches)	Max Shade Width Standard Orientation (inches)	Fabric can be Railroaded	Max Drop when Railroaded (inches)	Flame Retardant	Bacterial and Fungal Resistance	Oeko Tex Standard 100	Green Guard Certified
Abyss	57	55						
Ballet	118	114						
Basket Weave	120	116					X	
Casual Linen Blackout	84	82						
Casual Linen Light Filtering	74	72						
Classic	72	70	X	56.5	X			
Classic Duplex	72	70	X	56.5	X			
EcoGreen Aurora	94	92			X			X
EcoGreen Strata	118	116			X			X
EcoGreen Terrene	94	92	X	78.5	X			X
Elements	78	76	X	62.5	X			
Impressions	62	60						
Linen Impressions	78	76						
Marble	120	116					X	
Marble Sanctuary	60	58						
M-Screen 3%	98	96	X	82.5	X			X
M-Screen 5%	98	96	X	82.5	X			X
Olive Branch	60	58						
Patina	72	70					X	
Phifer SheerWeave 2360	98	96	X	82.5	X	X		X
Phifer SheerWeave 2390	98	96	X	82.5	X	X		X
Phifer SheerWeave 3000	98	96	X	82.5	X	X		
Polynesian Sands	72	70					X	
Poplar Leaf	72	70					X	
Provincial	78	76						
Sabbionetta	72	70					X	
Sahara	72	70					X	
Scrolling Leaf	120	116					X	
Shantung	110	108			X			
SilverScreen	94	92	X	78.5	X		X	
Soleil	98	96			X			
South Pacific Stripe	72	70					X	
Standards	72	70					X	
Waterfall	60	58						
Willow	57	55						
Willow Screen	72	70					X	

- If a fabric has the ability to be "railroaded," it means that it can be turned 90 degrees and made into a shade to accommodate windows which exceed the original maximum width.

- Maximum size for Envision Roller Shades depends on head rail. See pages 11-14 for details.

- Solar Screen Collection includes EcoGreen Strata, EcoGreen Terrene, EcoGreen Aurora, Soleil, M-Screen, Phifer SheerWeave® and SilverScreen™ fabrics. For individual solar screen properties, see pages 14-18.

- Fire classifications for EcoGreen Strata, EcoGreen Terrene, EcoGreen Aurora, M-Screen, Phifer SheerWeave®, SilverScreen™ and Soleil fabrics can be found on pages 14-18. Fire classifications for non-solar screen flame retardant fabrics are as follows:
    - Classics, Classic Duplex and Shantung: NFPA 701
    - Elements - Conforms to (Techniflam treated) BS5867, Part 2: Type B 1980 DOE/PSA Fire

- Classifications for bacterial and fungal resistant fabrics are as follows:
    - Phifer SheerWeave® 2360, 2390 and 3000: ASTM-G21 and ASTM-G22

Envision Head Rail Options

Standard Roller

Standard Tube (1" and 1½" diameter):

A = $1^1/_2$"
B = $1^1/_2$" or 2"

Oversized Tube (2" diameter):

A = 2"
B = $1^5/_8$" or $2^1/_8$"

For more information on tube sizes see page 23.

Mounting Dimensions

- The standard 1" and $1^1/_2$" tubes are available with two brackets in $1^1/_2$" and 2" widths.
- Minimum depth for flush inside mount including installation brackets: $2^1/_2$"
- The oversized 2" tube is available with two brackets in $1^5/_8$" and $2^1/_8$" widths.
- Minimum depth for flush inside mount including installation brackets: 3"

Shade Dimensions
- Minimum Width: 12"
- Maximum Width: See page 3 for fabric specific measurements
- Minimum Length: 12"
- Maximum Length: 120"

Finished Dimensions

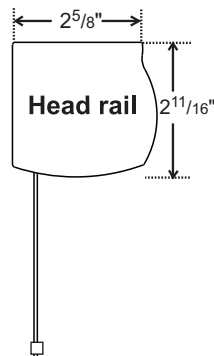|	Standard Tube (1" and 1½" diameter)	Oversized Tube (2" diameter)
Inside Mount		
Bracket to bracket measurement:	Ordered width minus $^3/_{16}$"	Ordered width
End to end roller width:	Ordered width minus $1^1/_{16}$"	Ordered width minus $1^3/_8$"
Fabric width:	Ordered width minus $1^1/_8$"	Ordered width minus $1^7/_{16}$"
Bottom rail width:	Ordered width minus $1^1/_8$"	Ordered width minus $1^7/_{16}$"
Outside Mount		
Bracket to bracket measurement:	Ordered width plus $^3/_{16}$"	Ordered width plus $^3/_{16}$"
End to end roller width:	Ordered width minus $^7/_8$"	Ordered width minus $1^3/_{16}$"
Fabric width:	Ordered width minus $^{15}/_{16}$"	Ordered width minus $1^1/_4$"
Bottom rail width:	Ordered width minus $^{15}/_{16}$"	Ordered width minus $1^1/_4$"
Side and Exact Mount		
Bracket to bracket measurement:	Ordered width	Ordered width
End to end roller width:	Ordered width minus $1^1/_{16}$"	Ordered width minus $1^3/_8$"
Fabric width:	Ordered width minus $1^1/_8$"	Ordered width minus $1^7/_{16}$"
Bottom rail width:	Ordered width minus $1^1/_8$"	Ordered width minus $1^7/_{16}$"

Shade Features
- Roll style: Standard or reverse (reverse roll information is found on page 23)
- Cord options: Bead chain only (cord loop information is found on page 23)
- Cord color: White, black or steel
- Clutch color: White or black (factory-matched with fabrics)
- Bottom rail color: White or black (beneath fabric wrap - matched with clutch)

Motorization

Envision Head Rail Options

UltraSleek™

2⁵/₈" → $2^5/_8"$

Head rail $2^{11}/_{16}"$

Mounting Dimensions

- Minimum depth for flush inside mount including installation brackets: $2^7/_8"$

- Minimum depth required for shallow mounting: 1"

- Minimum depth for side mount: $1^1/_8"$

- Maximum shade width for side mount: 48"

- Minimum surface area required for mounting: 1"

For more information on tube sizes see page 23.

Shade Dimensions
- Minimum Width: 12"
- Maximum Width: 84"
- Minimum Length: 12"
- Maximum Length: 84"*

* The maximum drop for South Pacific Stripe and Polynesian Sands fabrics with UltraSleek is 72".

Finished Dimensions

Inside Mount
- Head rail measurement: Ordered width minus $^3/_{16}"$ (measurement includes end caps)
- Fabric measurement: Ordered width minus $1^1/_{16}"$

Side (End) Mount
- Head rail measurement: Ordered width minus $^{11}/_{16}"$ (measurement includes end caps)
- Fabric measurement: Ordered width minus $1^9/_{16}"$

Outside Mount
- Head rail measurement: Ordered width plus $^3/_{16}"$ (measurement includes end caps)
- Fabric measurement: Ordered width minus $^{11}/_{16}"$

Exact End to End Mount
- Head rail measurement: Ordered width (measurement includes end caps)
- Fabric measurement: Ordered width minus $^7/_8"$

Shade Features
- Roll style: Standard only
- Cord type: Bead chain only
- Hardware color: White only with matching fabric strip
- Cord color: White (standard), black or steel available upon request
- Bottom rail color: White (standard color beneath fabric wrap), black available upon request

Motorization
- The UltraSleek Head Rail **cannot** be motorized. See pages 15-16 for information regarding motorized Envision Roller Shades.
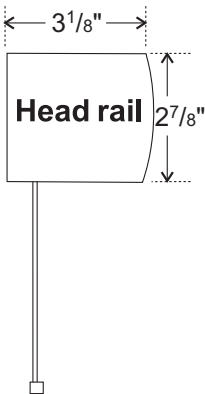
UltraSleek Head Rail Upgrade Surcharge

Width in Inches

24	30	36	42	48	54	60	66	72	78	84
77	85	94	102	112	123	133	144	152	160	166

Envision Head Rail Options

Cassette

$\leftarrow 3^{1}/_{8}" \rightarrow$

Head rail $2^{7}/_{8}"$

Mounting Dimensions:

- Minimum depth for flush inside mount including installation brackets: $3^{3}/_{4}"$

- Minimum depth required for shallow mounting: $^{3}/_{4}"$

- Minimum depth for side mount: $1^{1}/_{4}"$

- Maximum shade width for side mount: 48"

- Minimum surface area required for mounting: $^{3}/_{4}"$

For more information on tube sizes see page 23.

Shade Dimensions
- Minimum Width: 12"
- Maximum Width: 92"
- Minimum Length: 12"
- Maximum Length: 120"

Finished Dimensions

Inside Mount
- Head rail measurement: Ordered width minus $^{3}/_{16}"$
- Fabric measurement: Ordered width minus $1^{1}/_{16}"$

Side (End) Mount
- Head rail measurement: Ordered width minus $^{11}/_{16}"$ (measurement includes end caps)
- Fabric measurement: Ordered width minus $1^{9}/_{16}"$

Outside Mount
- Head rail measurement: Ordered width plus $^{3}/_{16}"$ (measurement includes end caps)
- Fabric measurement: Ordered width minus $^{11}/_{16}"$

Exact End to End Mount
- Head rail* measurement: Ordered width (measurement includes end caps)
- Fabric measurement: Ordered width minus $^{7}/_{8}"$

Shade Features
- Roll style: Standard only
- Cord type: Braided polyester (standard) or bead chain (optional)
- Hardware color: White only with matching fabric strip
- Polyester cord color: White only (standard)
- Bead cord color: White (standard), black or steel available upon request
- Bottom rail color: White (standard color beneath fabric wrap), black available upon request
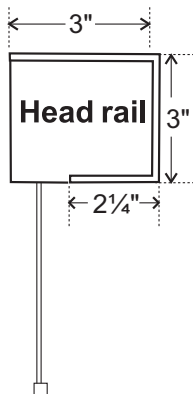
Motorization
- The Cassette Head Rail **can** be motorized. See pages 15-16 for details and page 8 for pricing.

Cassette Head Rail Upgrade Surcharge

Width in Inches

24	30	36	42	48	54	60	66	72	78	84	92
77	85	94	102	112	123	133	144	152	160	166	173

Envision Head Rail Options

Three Inch Fascia

Head rail — 3" — 3" — 2¼"

Mounting Dimensions

* Minimum depth for flush inside mount including installation brackets: 3"

* Minimum surface height required for outside mount: 3"

Fascia Colors
* Black
* Bronze
* Brushed Aluminum
* White

Shade Dimensions
* Minimum Width: 12"
* Maximum Width: See page 3 for fabric specific measurements
* Minimum Length: 12"
* Maximum Length: 120"

Finished Dimensions

Inside, Side, End and Exact Mount	Standard Tube (1 and 1½" diameter)	Oversized Tube (2" diameter)
Bracket to bracket measurement:	Ordered width	Ordered width
End to end roller width:	Ordered width minus $1^1/_{16}$"	Ordered width minus $1^3/_8$"
Fabric width:	Ordered width minus $1^1/_8$"	Ordered width minus $1^7/_{16}$"
Bottom rail width:	Ordered width minus $1^1/_8$"	Ordered width minus $1^7/_{16}$"

Outside Mount	Standard Tube (1 and 1½" diameter)	Oversized Tube (2" diameter)
Bracket to bracket measurement:	Ordered width plus $^3/_{16}$"	Ordered width plus $^3/_{16}$"
End to end roller width:	Ordered width minus $^7/_8$"	Ordered width minus $1^3/_{16}$"
Fabric width:	Ordered width minus $^{15}/_{16}$"	Ordered width minus $1^1/_4$"
Bottom rail width:	Ordered width minus $^{15}/_{16}$"	Ordered width minus $1^1/_4$"

Shade Features
* Roll style: Standard only
* Cord type: Steel bead chain
* Hardware color: Brushed Aluminum, Black or Bronze
* Bottom rail color: Black (standard color beneath fabric wrap), white available upon request

Motorization
* The Fascia Head Rail **can** be motorized. See pages 15-16 for details and page 8 for pricing.

Three Inch Fascia Upgrade Surcharge

Width in Inches

24	30	36	42	48	54	60	66	72	78	84	92	96	102	108	114	120
62	68	71	73	83	94	104	114	125	135	146	159	166	177	187	198	208

Envision Head Rail Motorization

Envision Roller Shades Roller shades can be motorized with Somfy motors. Comfortex offers the Radio Technology Somfy (RTS) battery powered, Sonesse™ 30 RTS and Sonesse 30 Dry Contact motors for Envision Roller Shades.

A variety of control options are available, including Radio Technology Somfy (RTS), which allows for control of individual or groups of window coverings from the same transmitter with radio frequency technology. The Sonesse 30 motors are easily integrated with home automation systems and feature the ability to adjust to precise intermediate positions for increased control flexibility.

Conveniently quiet, the Sonesse 30 motors are engineered with superior noise reduction technology and from a distance of 3 feet are barely heard.

Shade Dimensions
Standard Roller, Cassette or Fascia head rail is required for motorization.

	Width	Length
Abyss, Willow	Min. 12" Max. 55"	Min. 12" Max. 92"
Marble Sanctuary, Olive Branch, Waterfall	Min. 12" Max. 58"	Min. 12" Max. 92"
Impressions	Min. 12" Max. 60"	Min. 12" Max. 92"
Classic and Classic Duplex Poplar Leaf, Patina Polynesian Sands, Sabbionetta, Sahara, South Pacific Stripe, Standards Willow Screen	Min. 12" Max. 70"	Min. 12" Max. 92"
Casual Linen Light Filtering	Min. 12" Max. 72"	Min. 12" Max. 92"
Elements, Linen Impressions Provincial	Min. 12" Max. 76"	Min. 12" Max. 92"
Casual Linen Blackout	Min. 12" Max. 82"	Min. 12" Max. 92"
EcoGreen Aurora EcoGreen Terrene SilverScreen	Min. 12" Max. 92"	Min. 12" Max. 92"
M-Screen,Phifer SheerWeave Soleil	Min. 12" Max. 92"	Min. 12" Max. 92"
Shantung	Min. 12" Max. 92"	Min. 12" Max. 92"

Shade Dimensions *continued*

Ballet	Min. 12" Max. 92"	Min. 12" Max. 92"
Basket Weave, Marble EcoGreen Strata, Scrolling Leaf	Min. 12" Max. 92"	Min. 12" Max. 92"

Mounting Requirements For Motorized Envision Roller Shades

No special installation hardware or wiring requirements are needed to install motorized Envision Roller Shades with Standard Roller, Fascia, Cassette Head Rail. See pages 11-14 for mounting information.

Battery Wand

Mounting Options
The battery wand comes with two mounting options:

- **Head rail mount:** Battery wand clips are mounted on the back of the Envision Roller Shade with Cassette Head Rail using a high temperature, pressure sensitive adhesive.

- **Wall mount:** Battery wand clips are mounted to the wall.

The battery wand measures 17" and comes with eight lithium batteries and is white in color. The shade must be removed from the window to change batteries. Extension wires are available at 48" and 96" for use with the battery wand.

Battery Life

The battery life will vary based on the type of window covering selected, the size and weight of the window covering and the number of times you operate the shade on a daily basis.

For example, a 36" x 60" single honeycomb shade operated twice daily will have a battery life which lasts up to 18 months. Comfortex will warranty batteries for up to 3 months from date of purchase.

Battery Wand

Battery Replacement

Eight lithium batteries are included with the wand. Recommended replacement batteries are Energizer® AA lithium. These batteries are commonly found in department stores, home improvement centers, grocery and hardware stores.

Remote Options

There are two remote options for RTS motors. Both are available with 1 or 5 channel options. Please specify when ordering:
• Hand Held
• Wall Switch

Hand-Held Remote Option

The 1 Channel RTS Remote will operate all of the shades simultaneously.

The 5 Channel RTS Remote can operate up to five shadings or groups of shadings individually. When ordering, please specify which channels are assigned to each shade.

RTS 1 Channel Remote

RTS 5 Channel Remote

The remote control utilizes one 3V lithium battery (CR2430). Batteries are included. Comfortex will warranty batteries for up to 3 months from date of purchase.

Wall Switch Options

The RTS System has a wall switch option upgrade. The wall switch works just like a light switch to operate your shades. The switch is easy to install with a standard single gang electrical box and does not require any wiring.

There are two wall switch options. Please specify when ordering:
• 1 Channel
• 5 Channel

The 1 Channel RTS Wall Switch will operate all of the shadings simultaneously. The 5 Channel RTS Wall Switch can operate up to five shades or groups of shades individually.

The wall switch is available in two colors: white and ivory. Please specify when ordering.

RTS 1 Channel Wall Switch

RTS 5 Channel Wall Switch

Overall dimensions: Length: 4½" Width: 2¾" Depth: 1¼"
RTS Wall Switches use one 3V lithium battery (CR2430). Batteries are included. Comfortex will warranty batteries for up to 3 months from date of purchase.

Motorization Extras

Transformers and Power Panels
There are a variety of transformers and power panels available to suit your specific motorization configuration needs for the Sonesse 30 motors.

When making your transformer choice, choose from plug in wall, floor or table top options for wired din rail mount options. Your power panel options are varied and allow you to choose how many motors you want to control.

Call Technical Services for assistance with motors.

RTS System Wireless Timer
The RTS System Wireless Timer allows you set specific times for your shades to be raised or lowered. The Wireless Timer can be programmed to operate at the same time each day or different times every day. It has a security function that will raise or lower shades randomly to give the impression of an occupied home. Commands are transmitted via radio, so external wiring is not necessary.

RTS System Wireless Timer

Overall Dimensions: Length and Width: $3^1/8$" Depth: 1"
Wireless Timers use two 1.5V DC (AAA) batteries. Batteries are included. Comfortex will warranty batteries for up to 3 months from date of purchase.

RTS System Wireless Timer with Sun Sensor
The RTS System Wireless Timer with Sun Sensor has the same features as the timer shown above, but can also be programmed to raise and lower your shades according to the intensity of incoming sunlight. Commands are transmitted via radio, so external wiring is not necessary.

RTS System Wireless Timer with Sun Sensor

Overall Dimensions: Length and Width: $3^1/8$" Depth: 1"
Wireless Timers use two 1.5V DC (AAA) batteries. Batteries are included. Comfortex will warranty batteries for up to 3 months from date of purchase.

DC Power Supply
12 Volt DC power supply is available and requires a standard power outlet to power the motor. The power supply must plug in to the motor.

Battery Operated Motorized Shades Warranty
Somfy warrants their motors and motor control systems to be free from defects in materials and workmanship under normal and proper use for a period of five years starting from the date stamped on the motor. Mechanical, electrical and electronic accessories are warranted for one year from the date of invoice. Batteries are not covered by the warranty. Please see page 26 for complete Comfortex warranty information.

Envision Solar Screen Properties

See page 22 for a glossary of solar optical properties.

EcoGreen Aurora Specifications

Composition: 100% flame retardant polyester
Width: 94"
Weight: 166 g/sm
Thickness: .40 mm

Fenestration Properties

Name	TS	RS	AS	TV	OF	1/4 CL	1/4 HA
White	50	47	3	46	13	0.54	0.43
Mushroom	37	28	35	34	17	0.62	0.47
Onyx	19	5	76	24	16	0.72	0.52
Wheat	50	44	6	45	16	0.55	0.44

Fire Classification: NFPA 701-99 Small Scale
GREENGUARD Indoor Air Quality Certified®

EcoGreen Strata Specifications

Composition: 100% flame retardant polyester
Width: 118"
Weight: 160 g/sm
Thickness: .37 mm

Fenestration Properties

Name	TS	RS	AS	TV	OF	1/4 CL	1/4 HA
White	47	44	9	39	3	0.55	0.44
Charcoal Bronze	24	28	48	7	3	0.59	0.46
Onyx	25	29	46	6	3	0.59	0.46
Pearl Linen	39	39	22	26	4	0.56	0.44
Sterling	39	39	22	27	3	0.56	0.44
Wheat	45	42	13	35	4	0.56	0.44

Fire Classification: NFPA 701-99 Small Scale
GREENGUARD Indoor Air Quality Certified®

TS = Solar Transmittance   1/8 CL = 1/8" Clear Glass
RS = Solar Reflectance   1/4 CL = 1/4" Clear Glass
AS = Solar Absorptance   1/4 HA = 1/4" Heat Absorbing Glass
TV = Visual Transmittance   1/2 CL = 1/2" Insulating Clear Glass
OF= Openness Factor   1 CL = 1" Insulating Clear Glass
                                    1 HA = 1" Insulating Heat Absorbing Glass

The Solar Transmittance (TS), Solar Reflectance (RS), Solar Absorptance (AS), Visible Transmittance (TV) and Openness Factor (OF) were determined for the fabric alone. The Shading Coefficients (SC) were determined for the fabric used with a single light of 1/8" double strength glass, a 1/4" clear plate and a 1/4" heat (HA) plate. The Shading Coefficients are for the fabric hung internally unless otherwise indicated. The data and calculated results are presented in the above tables. The TS, RS, AS, TUV, TV and OF are expressed as percentages.

The above fenestration property tests were conducted by Matrix, Inc. at its Mesa, Arizona solar laboratory. The samples were tested in accordance with ASHRAE Standard 74-1988, "Methods of Measuring Solar-Optical Properties of Materials."

Envision Solar Screen Properties

See page 22 for a glossary of solar optical properties.

EcoGreen Terrene Specifications

Composition:	100% flame retardant polyester
Width:	94"
Weight:	175 g/sm
Thickness:	.50 mm

Fenestration Properties

Name	TS	RS	AS	TV	OF	1/4" CL	1/4" HA
Pure White	35	56	9	30	4	0.44	0.38
Wheat	28	51	21	21	4	0.46	0.39
Onyx	15	29	56	5	3	0.57	0.44
Cobalt	15	30	55	7	3	0.56	0.44
Bronze	13	27	60	5	4	0.58	0.45

Fire Classification:	NFPA 701-99 Small Scale

GREENGUARD Indoor Air Quality Certified®

M-Screen 3% Specifications

Composition:	36% fiberglass, 64% PVC
Width:	98"
Weight:	430 g/sm +/- 5%
Thickness:	.55 mm +/-5%

Fenestration Properties

Name	TS	RS	AS	TUV	TV	OF	1/8 CL	1/4 CL	1/4 HA
White/White	17	63	20	4	12	4.00	0.36	0.36	0.330
White/Linen	14	59	27	3	9	4.00	0.38	0.38	0.340
White/Stone	19	56	25	3	13	4.00	0.41	0.41	0.360
Linen/Linen	11	55	34	3	7	3.00	0.40	0.39	0.350
Linen/Stone	15	52	33	2	9	3.00	0.43	0.42	0.370
Charcoal/Charcoal	3	4	93	2	4	3.00	0.73	0.69	0.510
Charcoal/Apricot	5	14	81	3	4	3.00	0.67	0.64	0.480

Fire Classification:	NFPA 701-99 TM #1, California U.S. Title 19 M1

GREENGUARD Indoor Air Quality Certified®
GREENGUARD Children & Schools[SM] Certified

TS = Solar Transmittance	1/8 CL = 1/8" Clear Glass
RS = Solar Reflectance	1/4 CL = 1/4" Clear Glass
AS = Solar Absorptance	1/4 HA = 1/4" Heat Absorbing Glass
TV = Visual Transmittance	1/2 CL = 1/2" Insulating Clear Glass
OF= Openness Factor	1 CL = 1" Insulating Clear Glass
	1 HA = 1" Insulating Heat Absorbing Glass

The Solar Transmittance (TS), Solar Reflectance (RS), Solar Absorptance (AS), Visible Transmittance (TV) and Openness Factor (OF) were determined for the fabric alone. The Shading Coefficients (SC) were determined for the fabric used with a single light of 1/8" double strength glass, a 1/4" clear plate and a 1/4" heat (HA) plate. The Shading Coefficients are for the fabric hung internally unless other-wise indicated. The data and calculated results are presented in the above tables. The TS, RS, AS, TUV, TV and OF are expressed as percentages.

The above fenestration property tests were conducted by Matrix, Inc. at its Mesa, Arizona solar laboratory. The samples were tested in accordance with ASHRAE Standard 74-1988, "Methods of Measuring Solar-Optical Properties of Materials."

Envision Solar Screen Properties

See page 22 for a glossary of solar optical properties.

M-Screen 5% Specifications

Composition:	36% fiberglass, 64% PVC
Width:	98"
Weight:	405 g/sm +/- 5%
Thickness:	.55 mm +/-5%

Fenestration Properties

Name	TS	RS	AS	TUV	TV	OF	1/8 CL	1/4 CL	1/4 HA
White/White	20	63	17	7	15	6.00	0.36	0.36	0.330
White/Linen	21	56	23	7	15	6.00	0.42	0.41	0.360
White/Stone	22	56	22	7	15	6.00	0.42	0.41	0.360
Linen/Linen	18	51	31	7	12	5.00	0.45	0.44	0.370
Linen/Stone	23	48	29	7	15	5.00	0.48	0.47	0.390
Charcoal/Charcoal	6	5	89	7	7	5.00	0.73	0.69	0.510
Charcoal/Apricot	7	13	80	5	7	5.00	0.68	0.65	0.480

Fire Classification:	NFPA 701-99 TM #1, California U.S. Title 19 M1

GREENGUARD Indoor Air Quality Certified®
GREENGUARD Children & Schools℠ Certified

Phifer SheerWeave 2360 Specifications

Composition:	35% fiberglass, 65% vinyl on fiberglass
Width:	98"
Weight:	356 g/sm
Thickness:	0.43 mm

Fenestration Properties

Name	TS	RS	AS	TV	OF	1/8 CL	1/4 CL	1/4 HA	1/2 CL	1 CL	1 HA
Oyster	27	57	16	21	10	0.43	0.42	0.360	0.39	0.38	0.29
Oyster/Beige	24	51	25	19	10	0.46	0.45	0.380	0.43	0.41	0.31
Oyster/Pearl Gray	20	45	35	16	10	0.49	0.48	0.400	0.46	0.44	0.32
Beige	19	44	37	16	10	0.50	0.48	0.400	0.46	0.44	0.32
Charcoal/Gray	12	8	80	14	10	0.73	0.69	0.510	0.68	0.62	0.42

Fire Classification:	M 1, California U.S. Title 19 (small scale), NFPA 701-1999 TM#1 (small scale), NFPA 101 (Class A Rating), UBC (Class 1), British Standard 5876 and NFPA 701 TM#2 Large Scale
Bacteria and Fungal Resistance:	ASTM-G21 and ASTM-G22

GREENGUARD Indoor Air Quality Certified®
GREENGUARD Children & Schools℠ Certified

TS = Solar Transmittance	1/8 CL = 1/8" Clear Glass
RS = Solar Reflectance	1/4 CL = 1/4" Clear Glass
AS = Solar Absorptance	1/4 HA = 1/4" Heat Absorbing Glass
TV = Visual Transmittance	1/2 CL = 1/2" Insulating Clear Glass
OF= Openness Factor	1 CL = 1" Insulating Clear Glass
	1 HA = 1" Insulating Heat Absorbing Glass

The Solar Transmittance (TS), Solar Reflectance (RS), Solar Absorptance (AS), Visible Transmittance (TV) and Openness Factor (OF) were determined for the fabric alone. The Shading Coefficients (SC) were determined for the fabric used with a single light of 1/8" double strength glass, a 1/4" clear plate and a 1/4" heat (HA) plate. The Shading Coefficients are for the fabric hung internally unless otherwise indicated. The data and calculated results are presented in the above tables. The TS, RS, AS, TUV, TV and OF are expressed as percentages.

The above fenestration property tests were conducted by Matrix, Inc. at its Mesa, Arizona solar laboratory. The samples were tested in accordance with ASHRAE Standard 74-1988, "Methods of Measuring Solar-Optical Properties of Materials."

Envision Solar Screen Properties

See page 22 for a glossary of solar optical properties.

Phifer SheerWeave 2390 Specifications

Composition:	35% fiberglass, 65% vinyl on fiberglass
Width:	98"
Weight:	403 g/sm
Thickness:	.43 mm

Fenestration Properties

Name	TS	RS	AS	TV	OF	1/8 Cl	1/4 Cl	1/4 HA	1/2 CL	1 CL	1 HA
Oyster	21	61	18	14	5	0.38	0.38	0.340	0.36	0.35	0.27
Oyster/Beige	17	54	29	12	5	0.42	0.41	0.360	0.39	0.38	0.29
Oyster/Pearl Gray	14	45	41	10	5	0.48	0.46	0.390	0.45	0.43	0.32
Beige	14	47	39	10	5	0.46	0.45	0.380	0.43	0.42	0.31
Charcoal/Gray	5	9	86	6	5	0.70	0.67	0.490	0.66	0.6	0.41

Fire Classification:	M 1, California U.S. Title 19 (small scale), NFPA 701-1999 TM#1 (small scale), NFPA 101 (Class A Rating), UBC (Class 1), British Standard 5876 and NFPA 701 TM#2 Large Scale
Bacteria and Fungal Resistance:	ASTM-G21 and ASTM-G22

Phifer SheerWeave 3000 Specifications

Composition:	35% polyester, 65% vinyl on fiberglass (vertical threads)
	69% vinyl on polyester, 31% polyester (horizontal threads)
Width:	96"
Weight:	465 g/sm
Thickness:	.71 mm

Fenestration Properties

Name	TS	RS	AS	TV	OF	1/8 CL	1/4 CL	1/4 HA	1/2 CL	1 CL	1 HA
Pearl White	24	62	14	21	14	0.38	0.38	0.340	0.35	0.35	0.27
Pearl Sand Dollar	17	46	37	15	14	0.48	0.47	0.390	0.45	0.43	0.31
Mushroom Sand	22	45	33	21	14	0.50	0.48	0.400	0.46	0.44	0.32
Custard Cream	23	53	24	22	14	0.44	0.43	0.370	0.41	0.4	0.3
Pale Grey	19	40	41	19	14	0.53	0.51	0.410	0.49	0.46	0.33
Ninja Grey	12	8	80	14	14	0.73	0.69	0.510	0.68	0.62	0.42
Espresso	15	9	76	16	14	0.73	0.69	0.510	0.67	0.62	0.42

Fire Classification:	NFPA 701-1999 TM#1 (Small Scale), NFPA 101 (Class A Rating), UBC (Class 1) and NFPA 701 TM#2 Large Scale
Bacteria and Fungal Resistance:	ASTM-G21 and ASTM-G22

TS = Solar Transmittance	1/8 CL = 1/8" Clear Glass
RS = Solar Reflectance	1/4 CL = 1/4" Clear Glass
AS = Solar Absorptance	1/4 HA = 1/4" Heat Absorbing Glass
TV = Visual Transmittance	1/2 CL = 1/2" Insulating Clear Glass
OF = Openness Factor	1 CL = 1" Insulating Clear Glass
	1 HA = 1" Insulating Heat Absorbing Glass

The Solar Transmittance (TS), Solar Reflectance (RS), Solar Absorptance (AS), Visible Transmittance (TV) and Openness Factor (OF) were determined for the fabric alone. The Shading Coefficients (SC) were determined for the fabric used with a single light of 1/8" double strength glass, a 1/4" clear plate and a 1/4" heat (HA) plate. The Shading Coefficients are for the fabric hung internally unless otherwise indicated. The data and calculated results are presented in the above tables. The TS, RS, AS, TUV, TV and OF are expressed as percentages.

Envision Solar Screen Properties

See page 22 for a glossary of solar optical properties.

SilverScreen Specifications

Composition: PVC Coated Glass
Width: 98"
Weight: 400 g/sm
Thickness: .5 mm

Fenestration Properties

Name	TS	RS	TV	OF
White	4	76	6	4
Beige	4	76	N/A	4
Light Grey	4	76	N/A	4
Misty Grey	4	76	5	4
Dark Beige	4	76	N/A	4
Steel Grey	4	76	N/A	4
Bronze	4	76	N/A	4
Dark Grey	4	76	N/A	4
Chocolate Brown	4	76	N/A	4
Black	4	76	4	4

Fire Classification: NFP 92503 Classification M1
Oeko-Tex Standard 100:   formaldehyde free

Soleil Specifications

Composition: 35% fiberglass, 65% PVC
Width: 98"
Weight: 410 g/sm +/- 10
Thickness: .45 mm - .50 mm

Fenestration Properties

Name	TS	RS	AS	TUV	TL	RL	AL	SC	R1
Midnight/Bronze	3	6	91	3	4	4.00	92.00	0.72	1.365
Linen/White	16	57	27	3	14	50.00	36.00	0.40	1.365
White	18	65	17	2	16	60.00	24.00	0.34	1.365
Midnight/Storm	3	8	89	3	5	7.00	88.00	0.70	1.365
Midnight	3	4	93	3	5	3.00	92.00	0.73	1.365

Fire Classification: NFPA 701-99 Small Scale

TS = Solar Transmittance   1/8 CL = 1/8" Clear Glass
RS = Solar Reflectance   1/4 CL = 1/4" Clear Glass
AS = Solar Absorptance   1/4 HA = 1/4" Heat Absorbing Glass
TV = Visual Transmittance   1/2 CL = 1/2" Insulating Clear Glass
OF= Openness Factor   1 CL = 1" Insulating Clear Glass
                                 1 HA = 1" Insulating Heat Absorbing Glass

The Solar Transmittance (TS), Solar Reflectance (RS), Solar Absorptance (AS), Visible Transmittance (TV) and Openness Factor (OF) were determined for the fabric alone. The Shading Coefficients (SC) were determined for the fabric used with a single light of 1/8" double strength glass, a 1/4" clear plate and a 1/4" heat (HA) plate. The Shading Coefficients are for the fabric hung internally unless otherwise indicated. The data and calculated results are presented in the above tables. The TS, RS, AS, TUV, TV and OF are expressed as percentages.

The above fenestration property tests were conducted by Matrix, Inc. and Caesis Pty Ltd. The samples were tested in accordance with ASHRAE Standard 74-1988, "Methods of Measuring Solar-Optical Properties of Materials."

Glossary of Solar Optical Properties

Solar Optical Properties: Refer to the solar transmittance, solar reflectance and solar absorbancy of the solar screen fabrics. This is not in relationship to the application of the fabric materials.

(TV) Visual Transmittance: Measures glare. The number is a ratio of the amount of the total visible solar energy that passes through the glass and solar screen fabrics combined. Light colors have high TV factor. Dark colors have lower TV factor.

(TS) Solar Transmittance: The percentage of the amount of solar energy allowed to pass through the solar screen fabrics to the total amount. TS measures the percentage of solar energy passing through the fabric.

(RS) Solar Reflectance: The percentage of the amount of solar energy that is reflected or bounced off the solar screen fabrics to the total amount of solar energy falling on the shade. RS measures the percentage of solar energy reflected by the fabric.

(AS) Solar Absorptance: The percentage of the amount of solar energy that is absorbed by the solar screen fabrics, to the amount of total solar energy falling on the shade. AS measures the percentage of solar energy that the solar screen fabrics absorb.

TS =   Solar Transmittance
RS =   Solar Reflectance
AS =   Solar Absorptance

Solar screen fabrics reflect a percentage of the solar energy and absorb a percentage of the total solar energy. The energy that gets through the fabric and glass combined is the TS (Solar Transmittance). These three properties will always total 100%.

Light colors reflect more heat and have lower shading coefficients when used on the interior. Darker colors reduce glare and brightness while allowing for a better view. These factors and interior design considerations must be considered in fabric density and color selection.

(SC) Shading Coefficient: The percentage of solar heat gain through a combination of glass and solar screen fabric. When used on the interior, light colors have lower shading coefficients and dark colors have higher shading coefficients. A lower shading coefficient means lower heat gain (better thermal performance).

(OF) Openness Factor: The amount of open space in the material versus the amount closed or the density of weave (percentage of total surface area of fabric that is open). Selecting the proper density is affected by the sun exposure (east, west, north, south), whether the view is obstructed (by trees or other buildings), the type of glass, the sensitivity of the end user or the activity performed in the area.

UV Reduction: Ultraviolet reduction is directly related to openness factor (example: a 5% open fabric blocks 95% of the UV). UV rays are the damaging rays of the sun that fade carpet, home furnishings and furniture.

Reflecting Heat: Solar screen fabrics reflect and absorb heat before it even hits your windows, which prevents this energy from heating up the glass and transferring into the room you're trying to cool. This reduces the amount of heat that the air conditioning unit has to remove from the house.

Visibility: The amount of visibility depends on the percentage of reduction you are seeking. The higher the percentage reduction, the less visibility is retained.

General Information

Envision Roller Shade Bottom Rail

All Envision Roller Shades feature a unique bottom rail design. The shade fabric is wrapped around an elliptical grooved rail. Two plastic end caps secure the fabric in place. The result is an attractive look which enhances the overall appearance of the shade.

Bottom rails paired with the UltraSleek and Cassette Head Rails are white (standard) or black (available upon request) beneath the fabric wrap and have clear end caps. Envision Shades built with Standard Roller Head Rails feature bottom rails and end caps which are either white or black to match the clutches and/or bead cords.

Envision Shades built with Fascia hardware are built with black rails as standard. White is available upon request.

Envision Roller Shade Cord Information

Envision Roller Shades are available with a choice of cord loops: bead chain and braided polyester cord.

- A bead chain is the only option available with the Standard Roller. Select white, black or steel bead chain.

- A white bead chain is the standard with the UltraSleek Head Rail. Black or steel bead chain is available by request.

- Steel bead chain is the only cord color available with Envision Shades with Fascia.

- A white braided polyester cord loop comes standard with the Cassette Head Rail. The white bead chain is standard as a no charge option. Black or steel bead chain is available by request.

- The cord loops will measure the length indicated below unless otherwise specified.

Shade Length	Standard Loop
16" to 26$^7/_8$"	1' (12")
27" to 39$^7/_8$"	2' (24")
40" to 59$^7/_8$"	3' (36")
60" to 83$^7/_8$"	4' (48")
84" to 107$^7/_8$"	5' (60")
108" and greater	6' (72")

- The continuous cord loop can be ordered in custom lengths in 1' increments only. Maximum cord length is 8'.

Reverse Roll on Envision Roller Shades

A reverse roll option is available at no extra charge with all Envision Roller Shade fabrics on the **Standard Roller only**. The reverse roll allows the fabric to roll off the front of the roller instead of the back (the traditional style). The reverse roll conceals the roller for a contemporary, tailored appearance.

Certified Fabrics
GreenGuard® Fabrics

GREENGUARD Environmental Institute has established performance based standards to define goods with low chemical and particle emissions for use indoors.

The following fabrics have the passed GREENGUARD Indoor Air Quality Certified® certification program for low emitting interior building materials, furnishings, and finish systems:

• Phifer SheerWeave 2360	• Phifer SheerWeave 2390
• M-Screen 3%	• M-Screen 5%
• EcoGreen Aurora	• EcoGreen Strata
• EcoGreen Terrene	• South Pacific Stripe
• Polynesian Sands	

The following fabrics have the passed GREENGUARD Children & Schools^{SM} product certification program for low emitting interior building materials, furnishings, and finish systems used in educational (day care and K-12) environments:

• Phifer SheerWeave 2360	• Phifer SheerWeave 2390
• M-Screen 3%	• M-Screen 5%

Oeko Tex^{SM} Fabrics

The Oeko-Tex Standard 100 is a globally uniform testing and certification system for textile raw materials, intermediate and end products at all stages of production. It evaluates and screens for any harmful substances present within processed textiles intended to come into contact with consumers.

The following fabrics have the earned the Oeko Tex Standard 100 certification:

• Basket Weave	• SilverScreen
• Polynesian Sands	• Marble
• Sahara	• South Pacific Stripe
• Standards	• Patina
• Poplar Leaf	• Sabbionetta
• Willow Screen	• Scrolling Leaf

Roller Shade Tube Sizes

Below are the default roller tube sizes. Other sizes by request.
Standard Roller (No Head Rail)

Up to 84"	1" Roller
> 84" to 90"	1½" Roller
> 90" to 120"	2" Roller

Cassette Hardware

All widths (Max. 92")	1½" Roller

UltraSleek Hardware
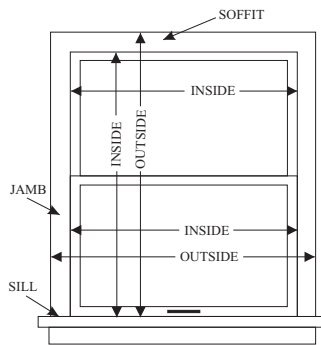
All widths (Max. 84")	1" Roller

Fabric will add an average $^1/_8$" to the diameter of the tube for every 10" of fabric rolled onto the tube.

General Information

Measuring Instructions for Roller Shades

Comfortex accepts measurements down to $\frac{1}{8}$" increments. Measurements with 16th (ex. $\frac{1}{16}$") increments will not be accepted.

- Precise width and length measurements are critical. Fabric width cannot be altered after the shade is fabricated.
- Please use a metal tape measure for accuracy from home to factory.
- The head rail must be installed perfectly level and installed evenly to ensure smooth operation. On an inside mount, it is recommended that you check to see that the mounting surface is level and consistent. If your soffit needs to be leveled, this should be done before measuring.
- Envision Roller Shades are leveled and weighted in the factory. When installed level, the fabric will not skew when raised. If the head rail is not installed level, skewing can occur that can damage the edge of the fabric. Be sure to follow the installation instructions carefully to ensure balanced operation.

Inside Mount

Measure across the width of your window opening in three different places - top, middle and bottom. Measurements should be taken within the window jamb. Provide the smallest of the three measurements to Comfortex. Be exact. Comfortex will make the necessary deductions to fit the window opening.

Measure the length of the window opening from the underside of the soffit to the surface of the window sill in two places - use the smallest of these two measurements.

Outside Mount

Measure the exact width and length of the area to be covered. On the width, allow at least $1\frac{1}{2}$" of an overlap on each side. An overlap of 3" on each side is recommended.

Be sure to take into consideration any obstructions such as window trim, molding, locks and window cranks.

Side Mount

Side mount is not available for the Standard Roller.

Envision Roller Shades with the Cassette Roller may be side mounted using "L" brackets. For side mounts, follow the instructions for inside mounts. An additional 2" will be taken off the standard inside mount deduction to allow room for the "L" brackets.

The maximum shade width utilizing the side mount option is 48".

Cleaning and Care

Occasional light vacuuming with a soft bristle attachment or gentle feather dusting is all that is required to keep Envision Roller Shades looking fresh and neat.

SilverScreen™ fabrics are easy to maintain. Dust can be removed with a soft feather duster or by vacuuming with a soft brush at the lowest position. When intensive cleaning is required, the colored (room) side can be cleaned with a wet cloth. NEVER use an alcohol or ammonia based cleaner (such as Windex®) on SilverScreen fabrics or allow those cleaners to come into contact with the silver side of the shade.

Phifer SheerWeave® fabrics are easy to maintain and only require occasional vacuuming with a soft brush attachment or washing with mild soap. Soak a sponge or damp cloth with the soapy solution and gently wipe or blot the stain from the fabric. To dry, allow the shade to air dry completely before raising.

Child Safety

Be aware that it is possible for children to become entangled in window covering cords. To reduce the risk of accidents, all cords must be kept out of the reach of children.

Cord tensioners are an effective way to implement this essential precaution. Please use them. To mount the cord tensioner at a safe height, take into account furniture or other objects upon which a child may climb.

Cord tensioners keep the continuous cord loops taut to prevent children and pets from becoming entangled and injuring themselves. Cord tensioners must be used with all Envision Roller Shades to comply with the Consumer Product Safety Commission (CPSC) Child Safety Guidelines.

General Information

Conditions of Sale

All Comfortex products are custom fabricated to your exact specifications. We cannot accept responsibility for errors in ordering or cancellations and charges after the order is in production.

Policies

Our policies are designed to provide a guide for doing business with Comfortex. Our first priority and number one policy is to provide the highest level of service and total satisfaction.

Comfortex will ship all orders for fabricated shades or blinds freight free via UPS, FedEx Ground or other similar method within the continental United States*.

A $3.75 per unit transportation surcharge will be added to all fabricated product orders, within the continental United States, including shades/blinds, vane packs, individual vanes, tracks, valance and cut yardage orders. In addition, a $40.00 Common Carrier surcharge** will be added for all orders shipped within the continental United States, that include shades or blinds with widths of 98" or more and are required to ship by motor freight. Exception: verticals with lengths of 84" or more, and roman shades with widths of 94" or more are required to ship by motor freight.

*Hawaii and Alaska Shipments

Hawaii: Shipments to the Hawaiian island of Oahu will incur a freight charge of $57.00 per order, plus $3.75 per unit. All other Hawaiian islands will incur an $88.00 per order freight charge, plus $3.75 per unit.

Alaska: Shipments to Alaska will incur a $6.00 per unit transportation surcharge.

** Common Carrier Surcharge

Hawaii Common Carrier Surcharge: In addition, an $88.00 Common Carrier surcharge for oversized shipments will be added to orders shipping to Hawaii.

Alaska Common Carrier Surcharge: In addition, an $88.00 Common Carrier surcharge for oversized shipments will be added to orders shipping to Alaska.

Note: Comfortex reserves the right to select another carrier, modify shipping terms or change freight policies without notice.

Service and Repair

Service may be obtained by contacting our Customer Service Department. No products, parts, components or other materials will be authorized for return or repair without prior approval from Comfortex. A *Return Authorization* (RA) may be obtained by contacting our Technical Service Department. In order to provide the quickest service possible, please have your Comfortex *Work Order* number and original order information available when you call.

Specifications

All Comfortex products are designed and tested to perform as intended within established, published parameters. Requests for "custom fabrication" of products outside of our published specifications may be considered, but are at the discretion of the Comfortex Technical Services department. Restrictions and additional charges apply.

Download installation instructions, order forms or additional price list copies at www.comfortexdealers.com. The files can be found in the *For Our Dealers* section.

General Information

Envision Roller Shades Warranty Information

Comfortex warrants that its window treatments will be free from defects in materials and workmanship for as long as the original residential purchaser owns the product, provided that the product was installed properly and in accordance with the installation instructions. The limited lifetime warranty is extended to the original residential purchaser only, in the original window for which it was installed.

The warranty does not include any conditions or damages resulting from accidents, alterations, misuse, abuse, misapplication, improper handling, installation, repairs, operation, cleaning, exposure to any and all natural and manufactured excessive heat sources. (Excessive heat sources include, but not limited to; magnification of sun light through cubes of glass, heaters of any kind, ovens, candles, lighting fixtures, etc.) This warranty does not cover variation in fabric color, grain, or texture in natural wood products nor excessive warping of wood slats in high humidity areas. Loss of pleating is not covered if the product is not being cycled (held in the raised position a portion of the time). Normal wear and tear is not covered.

All moving parts, such as cords, will eventually wear out and fabric may fray. Comfortex considers these things as normal wear and tear and will carry a three year limited warranty. All fabric, including fabric vanes, panels, inserts, and shades carry a five year warranty. All wood alloy and faux wood slats carry a 5 year warranty.

This limited warranty does not cover transportation costs to and from the retailer, costs of removal, re-measure, reinstallation of product, or any incidental or consequential damages.

If a Comfortex product is found to be defective in materials or workmanship, we will, at our discretion, repair, replace or refund the cost of a product which fails to conform to this limited warranty. Colors vary from lot to lot and may not exactly match sample swatch, sample book, or previous purchases. Discontinued components or color selections will be replaced with the closest equivalent current product. This shall be your sole remedy under this limited warranty.

To obtain service, contact the dealer from whom you purchased the product.

This Warranty is exclusive and in lieu of all other obligations, liabilities or warranties. In no event shall Comfortex or its licensed fabricators or distributors be liable for incidental or consequential damages, or for any other damage, loss or expense, cost or fee associated with such damage. In some states, exclusions for incidental or consequential damages are not allowable.

This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state. Policy is subject to change without notice.

This limited warranty is exclusive of commercial use. Contact Comfortex Technical Service for more information. No agent, representative, dealer or unauthorized employee has the authority to increase or alter the obligation of this warranty.

This limited warranty supersedes any previous versions.

Motorized Shades Warranty

Somfy warrants their motors and motor control systems to be free from defects in materials and workmanship under normal and proper use for a period of five years starting from the date stamped on the motor. Mechanical, electrical and electronic accessories are warranted for one year from the date of invoice. Batteries are not covered by the warranty.