

# MOTORIZED BLINDS AND SHADES

## Product Information Guide

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**GRABER®**

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# Features and Size Considerations

## Motorized Blinds and Shades

Refer to individual base product information guide for specific option and size information for the product being ordered.

Somfy® 12-volt RTS motors are available in two distinct categories outlined within this product information guide.

**RTS Motorization:** this category has been offered by Graber® for quite some time and has been a workhorse family of motors for cellular, pleated, solar, roller, natural, Fresco® Roman, Artisan Roman, sheer, layered shades, and our tilt products.

**Simple Motor:** designed to meet a value price point, this new category of Somfy motors is more limited in its lifting capacity and is available for cellular, pleated, solar, and roller shades only. Another notable characteristic of distinction between the two offerings is the general sound of the various motors, speed of operation, power options, and different means of handling certain programming steps. Please consider these product and performance differences before combining the two categories in the same application. All RTS controls can be used with this category.

Please see the RTS motors category sections for each of these motors when reviewing the guide.

## Radio Frequency (RF)

Motorized Graber blinds and shades feature Somfy radio frequency motors and accessories. All Somfy radio frequency motors utilize Somfy's proprietary protocol Radio Technology Somfy® (RTS). Motorized blinds and shades feature the following:

- Window treatments can be operated from virtually anywhere in the home up to 65 feet
- Provides easy operation of hard-to-reach or large windows
- Efficiently manages energy (heat gain and loss)
- Operate multiple window treatments simultaneously or individually
- A safer alternative to corded lift options; ideal for homes with children and pets
- Easily integrated with home automation systems
- Not available with hold down brackets or specialty window treatments

### Control and Power Options

- Multiple control and power options available; see options section for availability

## Channel and Control Assignments

Channel and control assignments are available when you purchase motorized window coverings. Specifying channels simplifies your install process by pre-programming each shade to the appropriate channel and control for your order.

- Each individual window covering can be assigned to a single channel, enabling unique control; multiple window coverings can also be assigned to an individual channel, enabling group control
  - Channel assignment is recommended on all radio frequency (RF) controls within the same product type
  - Custom programming available on handheld remotes, table top remotes, and wall switches only

## Standard Motors

- Available with solar and roller products only
- Standard motors are hard-wired both to power (line voltage) and controls
- 120-volt motors allow operation of large shades (see motorization size charts)
- Hard-wired controls provide the most reliable control of shades
- Control options include
  - Wall switches for convenient, reliable control or dry contact outputs provided by certain home automation packages
  - Group controllers to operate multiple shades with a single switch

## Features and Size Considerations

### CrystalPleat® Cellular Shades Motorized Lift

Order Entry: 12V RTS CL32 Motor (Somfy RTS) or 12V RTS CL30 Motor (Simple Somfy RTS)



**Refer to individual product information guide for specific option and size information for the product being ordered.**

#### Features

- Window treatments can be operated from virtually anywhere in the home
- Provides easy operation of hard-to-reach or large window coverings
- A safer alternative to corded lift options; ideal for homes with children and pets
- Efficiently manages energy (heat gain and loss)
- Operate multiple window treatments simultaneously or individually
- Easily integrated with home automation systems
- Low voltage motorization requires no costly electrical hard-wiring
- Motor located on right side within the headrail
- Multiple shades on one headrail available; each panel will have a motor and power source; not available with simple Somfy RTS motor (CL30)
- Not available with bottom up/top down, sun up/sun down, top down only, SkyTrack™, Perfect-Vue™, or specialty shapes
- Not available with hold down or side mount brackets
- Somfy Simple RTS motor (CL30) only available with a maximum of four (4) controllers

#### Control and Power Options

- Multiple control and power options available; see options section for availability

**NOTE:** Motorization components and accessories have a five-year limited warranty, excluding batteries.

#### Size Considerations

Fabric Style	Maximum Shade Size (square inches)	
	Simple Motor (CL30)	Somfy RTS (CL32)
½" Double Cell Sanctuary	3,000	7,500
1¼" Single Cell Sanctuary		
¾" Single Cell Sanctuary		
¾" Single Cell Scroll FR	6,000	11,500
½" Double Cell Splendor		
1¼" Single Cell Splendor		
All Other Fabrics	7,500	13,000

Motor Type	Minimum Width (inches)	Maximum Width (inches)	Minimum Height (inches)	Maximum Height (inches)
Simple Motor (CL30)	20	72*	9	72*
Somfy RTS (CL32)	20	144*	9	144*

\*This is the shade size maximum limit for this motor type, shades size limit may be smaller based on specific fabric type.  
For all inside mount applications, ¾" deduction is taken by the manufacturer on overall width.

#### Power Size Considerations

Motor Type	Fabric Style	Maximum Shade Size (square inches)		
		Single Battery Type	Dual Battery Type	Plug-In Transformer
Simple Motor (CL30)	½" Double Cell Sanctuary	≤ 1,500	≤ 2,500	≤ 3,000
	1¼" Single Cell Sanctuary			
	¾" Single Cell Sanctuary			
	¾" Single Cell Scroll FR	≤ 2,750	≤ 5,000	≤ 6,000
	½" Double Cell Splendor			
	1¼" Single Cell Splendor			
Somfy RTS (CL32)	All Other Fabrics	≤ 3,500	≤ 6,000	≤ 7,500
	All Fabrics	≤ 3,600	≤ 7,200	> 7,200

**NOTE:** The chart above reflects manufacturer's power source recommendation for best performance based on motor type, shade size, and fabric type. For best performance, orders of 10 or more shades are recommended to use plug-in transformer.

# Features and Size Considerations

## Pleated Shades Motorized Lift

Order Entry: 12V RTS CL32 Motor (Somfy RTS) or 12V RTS CL30 Motor (Simple Somfy RTS)



**Refer to individual product information guide for specific option and size information for the product being ordered.**

### Features

- Window treatments can be operated from virtually anywhere in the home
- Provides easy operation of hard-to-reach or large window coverings
- A safer alternative to corded lift options; ideal for homes with children and pets
- Efficiently manages energy (heat gain and loss)
- Operate multiple window treatments simultaneously or individually
- Easily integrated with home automation systems
- Low voltage motorization requires no costly electrical hard-wiring
- Motor located on right side within the headrail
- Multiple shades on one headrail available; each panel will have a motor and power source; not available with simple Somfy RTS motor (CL30)
- Available for standard bottom up shades; not available with specialty shapes
- Not available with hold down or side mount brackets
- Somfy Simple RTS motor (CL30) only available with a maximum of four (4) controllers

### Control and Power Options

- Multiple control and power options available; see options section for availability

**NOTE:** Motorization components and accessories have a five-year limited warranty, excluding batteries.

## Size Considerations

Fabric Style	Maximum Shade Size (square inches)	
	Simple Motor (CL30)	Somfy RTS (CL32)
2" Debonair, Desert, Grasscloth, and Serendipity	3,000	7,500
1" Debonair	4,500	9,000
2" Geneva and Prism		
1" Desert, Eloquence, Grasscloth, Imperial, Prism, and Tuvalu	6,000	11,500
2" Marquis and Sheer Linen		
1" Allure, Geneva, Marquis, Muse, Sheer Linen; Liner only shades	7,500	13,000

Motor Type	Shade Type	Minimum Width (inches)	Maximum Width (inches)	Minimum Height (inches)	Maximum Height (inches)
Simple Motor (CL30)	1" FashionPleat®	20	72*	9	72*
	1" EvenPleat®	20	72*	9	72*
	2" EvenPleat	20	72*	12	72*
Somfy RTS (CL32)	1" FashionPleat	20	144	9	96
	1" EvenPleat	20	120	6	96
	2" EvenPleat	20	144*	12	120

\*This is the shade size maximum limit for this motor type, shades size limit may be smaller based on specific fabric type.

For all inside mount applications, %" deduction is taken by the manufacturer on overall width.

## Power Size Considerations

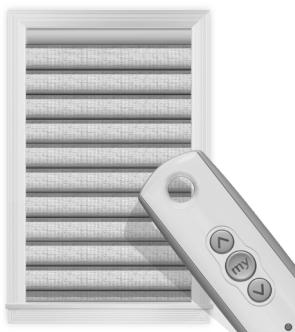
Motor Type	Fabric Style	Maximum Shade Size (square inches)		
		Single Battery Type	Dual Battery Type	Plug-In Transformer
Simple Motor (CL30)	2" Debonair, Desert, Grasscloth, and Serendipity	≤ 1,500	≤ 2,500	≤ 3,000
	1" Debonair	≤ 2,000	≤ 3,500	≤ 4,500
	2" Geneva and Prism			
	1" Desert, Eloquence, Grasscloth, Imperial, Prism, and Tuvalu	≤ 2,750	≤ 5,000	≤ 6,000
	2" Marquis and Sheer Linen	≤ 3,500	≤ 6,000	≤ 7,500
All Other Fabrics				
Somfy RTS (CL32)	All Fabrics	≤ 3,600	≤ 7,200	> 7,200

**NOTE:** The chart above reflects manufacturer's power source recommendation for best performance based on motor type, shade size, and fabric type. For best performance, orders of 10 or more shades are recommended to use plug-in transformer. The multi-motor power supply kit and solar power kit are available at any shade size.

## Features and Size Considerations

### Fresco® Roman Shades Motorized Lift

Order Entry: 12V RTS CL32 Motor



Refer to individual product information guide for specific option and size information for the product being ordered.

#### Features

- Window treatments can be operated from virtually anywhere in the home, up to 65 feet
- Provides easy operation of hard-to-reach or large window coverings
- A safer alternative to corded lift options; ideal for homes with children and pets
- Efficiently manages energy (heat gain and loss)
- Operate multiple window treatments simultaneously or individually
- Easily integrated with home automation systems
- Low voltage motorization requires no costly electrical hard-wiring
- Motor located on right side within the headrail
- Multiple shades on one headrail available; each panel will have a motor and power source
- Not available with bottom up/top down
- Not available with hold down or side mount brackets

#### Control and Power Options

- Multiple control and power options available; see options section for availability

**NOTE:** Motorization components and accessories have a five-year limited warranty, excluding batteries.

Roman Size Considerations	Minimum Width* (inches)	Maximum Width (inches)	Minimum Height (inches)	Maximum Height (inches)
Roman Shades: Classic Flat or Looped	25½ for smaller shades see below	144†	18	96

\*For all inside mount applications,  $\frac{3}{8}$ " deduction is taken by manufacturer on overall width.

†Based on fabric width.

Side mount maximum width = 60".

#### For Shades Less Than Minimum Width

If Shade Width is at Least (inches)	Maximum Height of Shade (inches)
19½ but less than 20	23½
20 but less than 20½	28¼
20½ but less than 21	34½
21 but less than 21½	40¾
21½ but less than 22	47½
22 but less than 22½	53¾
22½ but less than 23	59¾
23 but less than 23½	66
23½ but less than 24	72¼
24 but less than 24½	78½
24½ but less than 25	84¾
25 but less than 25½	91½
25½ or greater	96

## Features and Size Considerations

### Horizontal Blinds Motorized Tilt

Order Entry: Ring Lift with Motorized Tilt



Refer to individual product information guide for specific option and size information for the product being ordered.

Available with:

- 2" Traditions® Wood Blinds
- 2½" Traditions Wood Blinds
- 2" Elite Wood Blinds
- 2½" Elite Wood Blinds
- 2" Traditions Composite Blinds
- 2½" Traditions Composite Blinds
- 2" Vinyl Blinds
- 2" Grandeur™ Aluminum Blinds

#### Features

- Motorization will only tilt slats; raising or lowering the blind is manual with cord lift
- Provides easy operation of hard-to-reach or large window coverings
- A safer alternative to corded lift options; ideal for homes with children and pets
- Efficiently manages energy (heat gain and loss)
- Operate multiple window treatments simultaneously or individually
- Easily integrated with home automation systems
- Low voltage motorization requires no costly electrical hard-wiring
- Motor located on the left side within the headrail; cord lift is on the right side
- Not available with specialty shapes, hold down brackets, or multiple blinds on one headrail

#### Control and Power Options

- Multiple control and power options available; see options section for availability

**NOTE:** Motorization components and accessories have a five-year limited warranty, excluding batteries.

Size Considerations	Minimum Width (inches)	Maximum Width (inches)	Minimum Height (inches)	Maximum Height (inches)	Maximum Size (square inches)
Wood/Composite Blinds	19	96	10	120	2" and 2½": 7,200 2½": 6,480
2" Vinyl	19	84	9¾	108	7,200
2" Aluminum	19	84	9¾	126	7,200

**EXAMPLE:** 96" wide x 96" high = 9,216 square inches (over maximum size)  
18" wide x 62" high = 1,116 square inches (under minimum width)  
67" wide x 84" high = 5,628 square inches (size is within acceptable range)

## Features and Size Considerations

### Tradewinds® Natural Shades Motorized Lift

Order Entry: 12V RTS R28 Motor or 24V RTS ST30 Motor



Refer to individual product information guide for specific option and size information for the product being ordered.

#### Features

- Allow for easy operation of hard-to-reach or large window coverings
- Efficiently manages energy (heat gain and loss)
- A safer alternative to corded lift options; ideal for homes with children and pets
- Low voltage motorization requires no costly electrical hard-wiring
- Available on standard Roman or old style Roman
- Available with 9" standard valance, 9" premier valance, or 9" deco-trim valance
- Available with fabric edge banding, hem options, and liners
- Motor mounted to the underside of hardwood headrail on right side
- Not available with looped Roman, bottom up/top down, angle top, deco pocket and hem or hold down brackets
- Available with bottom corner and bottom center cut-outs

#### Control and Power Options

- Multiple control and power options available; see options section for availability

**NOTE:** Motorization components and accessories have a five-year limited warranty, excluding batteries.

Motorization Options	Yes	No
Standard Roman	•	
Old Style Roman	•	
Looped Roman		•
Bottom Up/Top Down		•
Angle Top		•
Multiple Shades on One Headrail	•	

Style	12-Volt Minimum Width (inches)	Maximum Size 12-Volt		24-Volt Minimum Width (inches)	Maximum Size 24-Volt	
		Shade (square inches)	With Liner (square inches)		Shade (square inches)	With Liner (square inches)
Inan, Lipo, Revelry, Serenity, Toushan II, Yunnan	18	2,755	2,333	22	3,821	3,235
Chencun	18	5,194	3,878	22	7,219	5,376
Amour, Boardwalk, Escape, Majian, Merino, Moniz	18	6,058	4,330	22	8,410	6,010
Beachfront, Madeira, Majuro, Melin, Paralian	18	6,854	4,723	22	9,513	6,547
Azores, Saterra, Terrestrial, Zishan	18	9,149	5,712	22	11,520	7,920

## Features and Size Considerations

### Artisan Roman Shades Motorized Lift

Order Entry: 12V RTS R28 Motor or 24V RTS ST30 Motor



Refer to individual product information guide for specific option and size information for the product being ordered.

#### Features

- Allow for easy operation of hard-to-reach or large window coverings
- Efficiently manages energy (heat gain and loss)
- A safer alternative to corded lift options; ideal for homes with children and pets
- Low voltage motorization requires no electrical hard-wiring
- Motor mounted to the underside of hardwood headrail on left or right side; standard on right
- Not available with balloon pleat, blackout liner, or multiple shades on one headrail

#### Control and Power Options

- Multiple control and power options available; see options section for availability

**NOTE:** Motorization components and accessories have a five-year limited warranty, excluding batteries.

#### Size Considerations

Width		Height		
Minimum (inches)	Maximum (inches)	Minimum (inches)	Classic, Seamless, and Relaxed Shades Maximum (inches)	Looped Shades Maximum (inches)
24	96	18	120	103

#### Motorized Maximum Shade Area

Shade Group	12-Volt Motorized Lift			24-Volt Motorized Lift		
	Standard (square inches)	Thermal or Water Repellent (square inches)	Flannel-Back (square inches)	Standard (square inches)	Thermal or Water Repellent (square inches)	Flannel-Back (square inches)
1	6,800	6,010	5,300	10,465	9,940	8,400
2	5,612	4,958	4,600	9,120	8,860	7,500
3	4,758	4,338	4,000	8,100	8,000	6,700
4	3,894	3,812	3,400	7,450	7,300	5,800
5	3,318	3,230	2,840	6,700	6,610	5,200
6	N/A	N/A	N/A	N/A	N/A	N/A

**NOTE:** Area is ordered width x ordered height in square inches.

**EXAMPLE:** 60" wide x 84" high = 5,040 square inches.

## Features and Size Considerations

### Mezzanine Layered Shades Motorized Lift

Order Entry: 12V RTS R28 Motor



Refer to individual product information guide for specific option and size information for the product being ordered.

#### Features

- Allow for easy operation of hard-to-reach or large window coverings
- Efficiently manages energy (heat gain and loss)
- A safer alternative to corded lift options; ideal for homes with children and pets
- Low voltage motorization requires no costly electrical hard-wiring
- Motor located on right or left side; standard on the right
- Fabric-wrapped cassette comes standard and creates a cohesive appearance in the window
- Not available with hold down brackets
- Down = down closed (shade lowered; stripes closed)
- My/Stop = down open (shade lowered; stripes closed)

#### Control and Power Options

- Multiple control and power options available; see options section for availability

**NOTE:** Motorization components and accessories have a five-year limited warranty, excluding batteries.

Light Gap			
Motor End		Idle End	
Inside Mount (inches)	Outside Mount (inches)	Inside Mount (inches)	Outside Mount (inches)
1 1/16	1	3/4	1 1/16

The fabric width is narrower than the finished shade width of the tube and its components. See chart above for light gap.

Size Considerations		
Style Name	Maximum Width* (inches)	Maximum Height* (inches)
Aravalli	96	52
Bernina	96	110
Cordillera	85	75
Crestones	97	84
Culebra	95	110
Glorieta	98	110
Glorieta Sheen	98	110
Herard	97	77
Vanoise	91	95
Venado	85	75

Minimum width: motorized lift 16".

Minimum length: 12" all control types.

\*If the height is shorter than the maximum, a slightly larger width may be available to order. Maximum width is 102".

## Features and Size Considerations

### Overture Sheer Shades Motorized Lift

Order Entry: 12V RTS R28 Motor



Refer to individual base product information guide for specific option and size information for the product being ordered.

#### Features

- Allow for easy operation of hard-to-reach or large window coverings
- Efficiently manages energy (heat gain and loss)
- A safer alternative to corded lift options; ideal for homes with children and pets
- Low voltage motorization requires no costly electrical hard-wiring
- Motor located on right or left side; standard on the right
- Fabric-wrapped cassette comes standard and creates a cohesive appearance in the window
- Not available with hold down brackets
- Down = down open (shade lowered; vanes open)
- My/Stop = down closed (shade lowered; vanes closed)

#### Control and Power Options

- Multiple control and power options available; see options section for availability

**NOTE:** Motorization components and accessories have a five-year limited warranty, excluding batteries.

Light Gap			
Motor End		Idle End	
Inside Mount (inches)	Outside Mount (inches)	Inside Mount (inches)	Outside Mount (inches)
1	1 $\frac{5}{16}$	1 $\frac{1}{16}$	5 $\frac{1}{8}$

The fabric width is narrower than the finished shade width of the tube and its components. See chart above for light gap.

Size Considerations		
Style Name	Maximum Width* (inches)	Maximum Height* (inches)
Glessner 2"	96	105
Glessner Sheen 2"	98	110
Glessner Woven 2"	96	110
Glessner 3"	96	105
Glessner Sheen 3"	98	110
Glessner Woven 3"	96	110
Marisco 2"	94	99
Marisco 2 $\frac{3}{4}$ "	94	98
San Simeon 3"	96	65
Roslin	94	75
Winchester	97	87
Winchester Sheen	102	69
Winchester Woven	97	87

Minimum width: motorized lift 16".

Minimum length: 12" all control types.

\*If the height is shorter than the maximum, a slightly larger width may be available to order. Maximum width is 102".

## Features and Size Considerations

### Lightweaves® Roller and Solar Shades Motorized Lift

Order Entry: 12V RTS R28 Non-rechargeable Motor, 12V RTS RU30 Motor, 12V RTS RU28 Motor Rechargeable, 24V RTS ST30 Motor, 120V STD ST40 Motor, 120V RTS ST40 Motor, or 120V Motor 3-Wire RTS



**Refer to individual base product information guide for specific option and size information for the product being ordered.**

#### Features

- Allow for easy operation of hard-to-reach or large window coverings
- Efficiently manages energy (heat gain and loss)
- A safer alternative to corded lift options; ideal for homes with children and pets
- Low voltage motorization requires no costly electrical hard-wiring
- Line voltage has multiple wiring options and is ideal for large interior solar shades
- Not available with hold down brackets
- Available with standard or reverse roll; cassette, fascia, and contour valance only available with standard roll
- Available with side channels with sealed hem bar only
- Motor located on the left or right side; standard on the right
- Simple RTS RU30 motor not available with fabric seaming or fabric turned width for height (railroading) option
- Simple RTS RU30 motor only available with fabric-wrapped hembar and up to four (4) controllers

#### Control and Power Options

- Multiple control and power options available; see options section for availability

**NOTE:** Motorization components and accessories have a five-year limited warranty, excluding batteries.

Light Gap (inches)				
Valance Type	Motor Type			
	12V R28 Non-rechargeable Motor/24V RTS ST30 Motor	12V RTS RU30 Motor	12V RTS RU28 Rechargeable Motor	120V STD ST40 Motor/120V RTS ST40 Motor
Contour, Fascia, No Valance	¾ to ½	¾ to 1⅓	¾ to 1⅔	¾ to 1⅔
All Cassette Sizes	¾ to 1	¾ to 1⅔	¾ to 1⅔	N/A
Dual No Cassette	¾ to ½	¾ to 1⅓	N/A	N/A
Dual with Cassette	¾ to 1	¾ to 1⅔	N/A	N/A

Size Considerations			
Motor Type	Order Entry	Minimum Width (inches)	Minimum Height (inches)
12-Volt Non-rechargeable	12V RTS R28 Non-rechargeable	16	
12-Volt Simple RTS	12V RTS RU30 Motor	13	
12-Volt Rechargeable	12V RTS RU28 Rechargeable	25½	
24-Volt Non-rechargeable	24V RTS ST30 Motor	20	
Interior 120-Volt Standard	120V STD ST40 Motor	23	
Interior 120-Volt RTS	120V RTS ST40 Motor	24½	

**NOTE:** See size charts on following pages.

Power Size Considerations Chart			
Motor Type	Battery Tube AA Alkaline (square inches)	Dual Battery Tube AA Alkaline (square inches)	Plug in Transformer (square inches)
12-Volt Non-rechargeable (R28)	≤ 3,600	≤ 7,200	> 7,200
	< 5,200	< 5,200	< 5,200
12-Volt Simple RTS (RU30)	< 3,500	≥ 3,500	≥ 3,500
	< 2,500	≥ 2,500	≥ 2,500
	< 1,750	< 4,000	≥ 4,000

**NOTE:** 72" x 72" = 5,184 square inches in area, this is the shade size maximum limit for this system, shade size maximum limit may be smaller based on specific fabric type. See Roller and Solar Simple Motor Size charts on following pages for maximum widths and heights. The chart above reflects manufacturer's power source recommendation for best performance based on motor type, shade size, and fabric type. For best performance, orders of 10 or more shades are recommended to use plug-in transformer.

## Features and Size Considerations

### Roller and Solar Shades: 12-Volt Motor Maximum Shade Size (12V RTS RU30 Motor)

Fabric	Small, Medium, Large Cassette, Contour Valance, No Valance, No Cassette, 3" and 4" Fascia		Dual Shades	
			No Cassette, Large Cassette	
	Maximum Width (inches)	Maximum Height (inches)	Maximum Width (inches)	Maximum Height (inches)
Allure	72	72	72	72
Arboretum BO	72	72	72	72
Arboretum LF	72	72	72	72
Banquet	72	72	72	72
Bravado BO	72	72	72	72
Bravado LF	72	72	72	72
Broadcast	70	72	70	72
Cambridge LF 76" (Ivory)	72	72	72	72
Cambridge LF 92" (Clay, Cocoa Bean, Inkwell, Misty, Off White, White)	72	72	72	72
Cambridge RD 76" (Ivory)	72	72	72	72
Cambridge RD 92" (Clay, Cocoa Bean, Inkwell, Misty, Off White, White)	72	72	72	72
Capri	71	72	71	72
Chronicles	72	72	72	72
Complex	72	72	72	72
Conservancy BO	59	72	59	72
Conservancy LF	66	72	66	72
Consummate Silk	72	72	72	72
Cumulus	72	72	72	72
Ellington 1%	65	72	65	72
Ellington 3%	67	72	67	72
Ellington 5%	59	72	59	72
Empire	72	72	72	72
Empirical	72	72	72	72
Emporium (All Others)	72	72	72	72
Emporium (Bookplate White)	72	72	72	72
Emporium (Sepia Snapshot)	72	72	72	72
Essential	70	72	70	72

## Features and Size Considerations

### Roller and Solar Shades: 12-Volt Motor Maximum Shade Size (12V RTS RU30 Motor)

Fabric	Small, Medium, Large Cassette, Contour Valance, No Valance, No Cassette, 3" and 4" Fascia		Dual Shades	
			No Cassette, Large Cassette	
	Maximum Width (inches)	Maximum Height (inches)	Maximum Width (inches)	Maximum Height (inches)
Exposition	72	66	72	66
Gleam	69	72	69	72
Guildhall	72	72	72	72
Harmony	72	72	72	72
Herald	72	72	72	72
Merit	66	72	66	72
Momentum	72	72	72	72
Monticello	71	70	71	70
Opulent	72	72	72	72
Paradigm	72	72	72	72
Paragon	66	72	66	72
Plexus 1%	61	72	61	72
Plexus 3%	65	72	65	72
Plexus 5%	70	72	70	72
Prairie	72	72	72	72
Prodigy	56	72	56	72
Providence BO	59	72	59	72
Providence LF	66	72	66	72
Quintessence	68	72	68	72
Reaction	72	72	72	72
Renaissance	72	72	72	72
Resolve	72	72	72	72
Riverbend	72	72	72	72
Rujin	72	32	72	32
Sabine	72	72	72	72
Salutation	72	72	72	72

## Features and Size Considerations

### Roller and Solar Shades: 12-Volt Motor Maximum Shade Size (12V RTS RU30 Motor)

Fabric	Small, Medium, Large Cassette, Contour Valance, No Valance, No Cassette, 3" and 4" Fascia		Dual Shades	
			No Cassette, Large Cassette	
	Maximum Width (inches)	Maximum Height (inches)	Maximum Width (inches)	Maximum Height (inches)
Sanguine	72	72	72	72
Santorini	72	72	72	72
Sedona	72	72	72	72
Shadow	72	72	72	72
Sheffield	72	72	72	72
Standard Weave 1%	72	72	72	72
Standard Weave 3%	72	72	72	72
Standard Weave 5%	72	72	72	72
Standard Weave 10%	72	72	72	72
Suburban II	72	72	72	72
Tableaux	65	72	72	60
Thesis	70	72	72	72
Vanguard 1%	72	72	72	72
Vanguard 3%	72	72	72	72
Vanguard 5%	72	72	72	72
Venture	64	72	64	72
Wayfarer	72	72	72	72
Whitcomb	72	72	72	72
Whitehall	72	72	72	72

**12V RTS R28**  
**Non-rechargeable Motor**  
 Minimum Width: 16"  
 Minimum Height: 13"

## Features and Size Considerations

**12V RTS RU28**  
**Rechargeable Motor**  
 Minimum Width: 25½"  
 Minimum Height: 13"

## Roller and Solar Shades: 12-Volt Motor Maximum Shade Size (12V RTS R28 Non-rechargeable Motor and 12V RU28 Rechargeable Motor)

Valance Type	Fabric	Normal Fabric Orientation						Fabric Turned Width for Height (railroaded)					
		Small Cassette	Medium Cassette	Large Cassette/Contour Valance/No Cassette/No Valance	3" Fascia	4" Fascia	Small Cassette	Medium Cassette	Large Cassette/Contour Valance/No Cassette/No Valance at Maximum Width	3" Fascia	4" Fascia	Width (inches)	Height (inches)
Allure	91	131	91	131	91	131	91	95	98	95	98	95	98
Arboretum BO	87	97	82	131	82	131	82	75	84	75	84	75	84
Arboretum LF	90	136	90	136	90	136	90	136	82	84	82	84	82
Banquet	85	139	85	144	85	144	85	144	96	74	96	74	96
Bravado BO	73	93	82	125	82	125	84	111	82	125	Not available	74	74
Bravado LF	79	113	91	131	91	131	91	131	91	131	Not available	86	86
Broadcast	71	72	77	111	75	124	81	86	75	124	81	86	75
Cambridge LF 76" (Ivory)	77	144	77	144	77	144	77	144	86	68	86	68	68
Cambridge LF 92" (Clay, Cocoa Bean, Inkwell, Misty, Off White, White)	92	140	92	140	92	140	92	140	84	84	84	84	84
Cambridge RD 76" (Ivory)	77	113	77	144	77	144	77	144	79	68	79	68	79
Cambridge RD 92" (Clay, Cocoa Bean, Inkwell, Misty, Off White, White)	85	113	82	138	82	138	82	138	76	84	76	84	84
Capri	71	104	71	144	71	144	71	143	71	144	Not available	76	76
Chronicles	85	93	80	125	80	125	80	125	80	125	Not available	84	84
Complex	71	83	77	126	77	126	81	100	77	126	Not available	82	82
Conservancy BO	57	87	63	126	63	126	65	103	63	126	Not available	79	79
Conservancy LF	76	82	73	125	73	125	74	113	73	125	Not available	71	71
Consummate Silk	78	124	78	144	78	144	78	144	78	144	Not available	71	71
Cumulus	73	84	80	122	80	122	83	100	80	122	Not available	71	71
Ellington 1%	74	82	71	106	71	106	71	106	71	106	Not available	71	71

**NOTES:** Due to continuous manufacturing improvements, minimums and maximums are subject to change. Please call customer service for up to date size considerations. See dual shade section for motorization information.

**12V RTS R28**  
Non-rechargeable Motor  
Minimum Width: 16"  
Minimum Height: 13"

## Features and Size Considerations

**12V RTS RU28**  
Rechargeable Motor  
Minimum Width: 25½"  
Minimum Height: 13"

## Roller and Solar Shades: 12-Volt Motor Maximum Shade Size (12V RTS R28 Non-rechargeable Motor and 12V RU28 Rechargeable Motor)

Valance Type	Normal Fabric Orientation						Fabric Turned Width for Height (railroaded)											
	Small Cassette			Medium Cassette			Small Cassette			Medium Cassette			Large Cassette/Contour Valance/No Cassette/No Valance			Large Cassette/Contour Valance/No Cassette/No Valance at Maximum Width		
	Fabric	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)	
Ellington 3%	76	85	73	110	73	110	73	110	73	110	76	85	73	110	73	110	73	110
Ellington 5%	67	85	63	123	63	123	63	123	63	123	63	123	63	123	63	123	63	123
Empire	92	141	92	144	92	144	92	144	92	144	92	144	92	144	92	144	92	144
Empirical	93	123	93	123	93	123	93	123	93	123	93	123	93	123	93	123	93	123
Emporium (All Others)	74	114	85	132	85	132	85	132	85	132	85	132	85	132	85	132	85	132
Emporium (Bookplate White)	88	118	87	131	87	131	87	131	87	131	87	131	87	131	87	131	87	131
Emporium (Sepia Snapshot)	73	111	82	144	82	144	82	144	82	144	82	144	82	144	82	144	82	144
Essential	70	144	70	144	70	144	70	144	70	144	70	144	70	144	70	144	70	144
Exposition	75	66	82	102	79	124	71	92	71	92	71	92	71	92	71	92	71	92
Gleam	76	106	75	119	75	119	75	119	75	119	75	119	75	119	75	119	75	119
Guildhall	68	97	77	123	77	123	78	115	78	115	77	115	77	115	77	115	77	115
Harmony	91	132	91	133	91	133	91	133	91	133	91	133	91	133	91	133	91	133
Herald	92	141	92	144	92	144	92	144	92	144	92	144	92	144	92	144	92	144
Merit	75	93	73	108	73	108	73	108	73	108	73	108	73	108	73	108	73	108
Momentum	73	79	80	119	79	127	84	94	79	94	79	94	79	94	79	94	79	94
Monticello	71	70	77	107	75	125	82	83	75	125	71	125	71	125	71	125	71	125
Opulent	88	133	88	133	88	133	88	133	88	133	88	133	88	133	88	133	88	133
Paradigm	75	79	82	121	82	123	86	94	82	94	82	94	82	94	82	94	82	94
Paragon	76	89	73	109	73	109	73	109	73	109	73	109	73	109	73	109	73	109
Plexus 1%	68	72	74	109	74	109	78	86	74	109	78	109	74	109	78	109	74	109
Plexus 3%	69	76	75	112	75	112	78	91	75	112	69	76	75	112	75	112	75	112
Plexus 5%	68	84	75	122	75	122	78	100	75	122	68	84	75	122	75	122	75	122
Prairie	90	123	89	132	89	132	89	132	89	132	89	132	89	132	89	132	89	132
Prodigy	56	72	61	111	60	122	64	86	60	122	64	86	60	122	64	86	60	122
Providence BO	68	82	63	126	63	126	64	117	63	126	64	117	63	126	64	117	63	126
Providence LF	75	97	73	127	73	127	73	127	73	127	73	127	73	127	73	127	73	127

**NOTES:** Due to continuous manufacturing improvements, minimums and maximums are subject to change. Please call customer service for up to date size considerations.

See dual shade section for motorization information.

**12V RTS R28**  
Non-rechargeable Motor  
Minimum Width: 16"  
Minimum Height: 13"

**12V RTS RU28**  
Rechargeable Motor  
Minimum Width: 25½"  
Minimum Height: 13"

## Features and Size Considerations

### Roller and Solar Shades: 12-Volt Motor Maximum Shade Size (12V RTS R28 Non-rechargeable Motor and 12V RU28 Rechargeable Motor)

Valance Type	Fabric	Normal Fabric Orientation						Fabric Turned Width for Height (railroaded)					
		Small Cassette	Medium Cassette	Large Cassette/Contour Valance/No Cassette/No Valance	3" Fascia	4" Fascia	Small Cassette	Medium Cassette	Large Cassette/Contour Valance/No Cassette/No Valance at Maximum Width	3" Fascia	4" Fascia	Width (inches)	Height (inches)
Quintessence	65	93	73	122	73	122	74	111	73	122	Not available	Not available	Not available
Reaction	85	93	80	125	80	125	80	125	80	125	Not available	Not available	Not available
Renaissance	92	140	92	140	92	140	92	140	92	140	Not available	Not available	Not available
Resolve	71	100	80	127	80	127	81	119	80	127	Not available	Not available	Not available
Riverbend	72	77	72	117	72	144	72	106	72	144	Not available	Not available	Not available
Rujin	72	32	72	59	72	119	72	46	72	96	Not available	Not available	Not available
Sabine	84	89	79	123	79	123	79	123	79	123	Not available	Not available	Not available
Saturation	79	118	93	123	93	123	93	123	93	123	Not available	Not available	Not available
Sanguine	70	82	77	120	77	120	79	97	77	120	Not available	Not available	Not available
Santorini	77	135	77	144	77	144	77	144	77	144	Not available	Not available	Not available
Sedona	72	109	72	144	72	144	72	144	72	144	Not available	Not available	Not available
Shadow	84	97	80	123	80	123	80	123	80	123	Not available	Not available	Not available
Sheffield	95	101	91	135	91	135	91	135	91	135	Not available	Not available	Not available
Standard	82	89	77	125	77	125	77	125	77	125	77	77	77
Weave 1%	Standard	83	89	78	124	78	124	78	124	78	124	78	78
Weave 3%	Standard	83	97	79	124	79	124	79	124	79	124	79	79
Weave 5%	Standard	84	101	81	120	81	120	81	120	81	120	81	81
Weave 10%	Suburban II	72	144	72	144	72	144	72	144	72	144	100	62
Tableaux	72	60	79	92	74	122	68	83	74	122	Not available	Not available	Not available
Thesis	70	90	70	137	70	144	70	124	70	144	Not available	Not available	Not available
Vanguard 1%	82	89	77	125	77	125	77	125	77	125	77	77	75
Vanguard 3%	83	89	78	124	78	124	78	124	78	124	78	78	74
Vanguard 5%	83	97	79	124	79	124	79	124	79	124	79	79	74
Venture	62	88	71	104	71	104	71	104	71	104	Not available	Not available	Not available
Wayfarer	92	144	92	144	92	144	92	144	92	144	Not available	Not available	Not available
Whitcomb	90	118	89	132	89	132	89	132	89	132	Not available	Not available	Not available
Whitehall	87	106	82	144	82	144	82	144	82	144	82	82	84

**NOTES:** Due to continuous manufacturing improvements, minimums and maximums are subject to change. Please call customer service for up to date size considerations.  
See dual shade section for motorization information.

## Features and Size Considerations

Minimum Width: 20"  
Minimum Height: 13"

### Roller and Solar Shades: 24-Volt Motor Maximum Shade Size (24V RTS ST30 Motor)

Valance Type	Normal Fabric Orientation								Fabric Turned Width for Height (railroaded)									
	Small Cassette		Medium Cassette		Large Cassette/Contour Valance/No Cassette/No Valance		3" Fascia		Small Cassette		Medium Cassette		Large Cassette/Contour Valance/No Cassette/No Valance		3" Fascia		4" Fascia	
	Fabric	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)	
Allure	91	131	108	144	108	144	108	144	95	98	127	95	127	95	127	95	127	
Arboretum BO	87	97	92	124	92	144	82	131	89	82	89	82	89	82	89	82	82	
Arboretum LF	90	136	92	144	92	144	92	125	92	144	96	82	96	82	96	82	82	
Banquet	85	139	85	144	85	144	85	144	85	144	96	74	96	74	96	74	74	
Bravado BO	90	76	82	125	108	144	84	111	108	144	91	109	144	91	109	144	Not available	
Bravado LF	95	93	109	119	109	144	91	131	101	135	86	101	135	87	101	135	Not available	
Broadcast	87	58	77	111	101	135	81	101	135	87	58	77	111	101	135	81	86	
Cambridge LF 76" (Ivory)	77	144	77	144	77	144	77	144	77	144	101	66	101	66	134	63	101	
Cambridge LF 92" (Clay, Cocoa Bean, Inkwell, Misty, Off White, White)	92	140	92	144	92	144	92	140	92	144	98	82	98	82	98	98	82	
Cambridge RD 76" (Ivory)	77	113	77	144	77	144	77	144	77	144	93	66	93	66	125	63	93	
Cambridge RD 92" (Clay, Cocoa Bean, Inkwell, Misty, Off White, White)	85	113	92	144	92	144	82	138	92	144	90	82	90	82	122	79	90	
Capri	71	85	71	144	71	144	71	124	71	144	71	144	71	144	71	144	Not available	
Chronicles	85	93	97	119	97	144	80	125	97	144	97	144	97	144	97	144	Not available	
Complex	87	68	77	126	97	144	81	100	97	144	97	144	97	144	97	144	Not available	
Conservancy BO	70	71	91	90	85	133	65	103	85	133	85	133	85	133	85	133	Not available	
Conservancy LF	76	82	99	105	97	131	74	113	97	131	97	131	97	131	97	131	Not available	
Consummate Silk	78	124	78	144	78	144	78	144	78	144	78	144	78	144	78	144	Not available	
Cumulus	89	68	80	122	97	144	83	100	97	144	97	144	97	144	97	144	Not available	
Ellington 1%	74	82	97	105	95	117	71	106	95	117	74	82	97	105	95	117	95	
Ellington 3%	76	85	99	109	97	125	73	110	97	125	76	85	99	109	97	125	97	
Ellington 5%	67	85	87	109	86	122	63	123	86	122	92	144	92	144	92	144	Not available	
Empire	92	141	92	144	92	144	96	144	96	144	96	144	96	144	96	144	96	
Empirical	93	123	96	144	96	144	96	144	96	144	96	144	96	144	96	144	96	

**NOTES:** Due to continuous manufacturing improvements, minimums and maximums are subject to change. Please call customer service for up to date size considerations.  
See dual shade section for motorization information.

Minimum Width: 20"  
Minimum Height: 13"

## Features and Size Considerations

### Roller and Solar Shades: 24-Volt Motor Maximum Shade Size (24V RTS ST30 Motor)

Valance Type	Fabric	Normal Fabric Orientation						Fabric Turned Width for Height (railroaded)					
		Large Cassette/Contour Valance/No Cassette/No Valance			3" Fascia			Small Cassette			Large Cassette/Contour Valance/No Cassette/No Valance at Maximum Width		
		Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)
Emporium (All Others)	Emporium (All Others)	89	97	96	124	96	144	85	132	96	144	Not available	
Emporium (Bookplate White)	Emporium (Bookplate White)	88	118	96	144	96	144	87	131	96	144	Not available	
Emporia (Sepia Snapshot)	Emporia (Sepia Snapshot)	88	97	96	124	96	144	82	140	96	144	Not available	
Essential	Essential	70	144	70	144	70	144	70	144	70	144	Not available	
Exposition	Exposition	92	53	82	102	97	144	86	79	97	144	Not available	
Gleam	Gleam	76	106	92	136	92	144	75	119	92	144	Not available	
Guildhall	Guildhall	84	79	97	101	97	144	78	115	97	144	Not available	
Harmony	Harmony	91	132	92	144	92	144	91	133	92	144	Not available	
Herald	Herald	92	141	92	144	92	144	92	144	92	144	Not available	
Merit	Merit	75	93	97	119	97	122	73	108	97	122	Not available	
Momentum	Momentum	90	64	80	119	95	144	84	94	95	144	Not available	
Monticello	Monticello	88	56	77	107	97	144	82	83	97	144	Not available	
Opulent	Opulent	88	133	96	144	96	144	96	144	96	144	Not available	
Paradigm	Paradigm	92	64	82	121	97	144	86	94	97	144	Not available	
Paragon	Paragon	76	89	98	114	97	124	73	109	97	124	Not available	
Plexus 1%	Plexus 1%	84	58	74	109	97	134	78	86	97	134	Not available	
Plexus 3%	Plexus 3%	85	62	75	112	99	133	78	91	99	133	Not available	
Plexus 5%	Plexus 5%	85	68	75	122	99	144	78	100	99	144	Not available	
Prairie	Prairie	90	123	108	144	108	144	108	110	108	144	Not available	
Prodigy	Prodigy	69	58	61	111	82	123	64	86	82	123	Not available	
Providence BO	Providence BO	68	82	88	105	85	133	64	117	85	133	Not available	
Providence LF	Providence LF	75	97	98	123	97	134	73	127	97	134	Not available	
Quintessence	Quintessence	79	76	103	97	98	131	74	111	98	131	Not available	
Reaction	Reaction	85	93	97	119	97	144	80	125	97	144	Not available	
Renaissance	Renaissance	92	140	92	144	92	144	92	140	92	144	Not available	
Resolve	Resolve	87	82	97	105	97	144	81	119	97	144	Not available	
Riverbend	Riverbend	72	62	72	117	72	144	72	91	72	144	Not available	
Ruijin	Ruijin	72	24	72	51	72	119	72	38	72	96	Not available	

**NOTES:** Due to continuous manufacturing improvements, minimums and maximums are subject to change. Please call customer service for up to date size considerations.  
See dual shade section for motorization information.

## Features and Size Considerations

Minimum Width: 20"  
Minimum Height: 13"

### Roller and Solar Shades: 24-Volt Motor Maximum Shade Size (24V RTS ST30 Motor)

Valance Type	Normal Fabric Orientation								Fabric Turned Width for Height (railroaded)							
	Small Cassette				Medium Cassette				Large Cassette/Contour Valance/No Cassette/No Valance				Large Cassette/Contour Valance/No Cassette/No Valance at Maximum Width			
	Fabric	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)						
Sabine	84	89	97	114	97	144	79	123	97	144	79	144	77	144	77	144
Salutation	96	97	96	124	96	144	93	123	96	144	93	144	79	144	79	144
Sanguine	79	86	77	120	79	144	79	97	79	144	77	144	77	144	77	144
Santorini	77	124	77	144	77	144	77	144	77	144	77	144	77	144	77	144
Sedona	72	89	72	144	72	144	72	129	72	144	72	144	72	144	72	144
Shadow	84	97	109	124	107	136	80	123	107	136	107	136	107	136	107	136
Sheffield	95	101	108	130	108	144	91	135	108	144	108	144	108	144	108	144
Standard Weave 1%	82	89	107	114	102	144	77	125	102	144	82	89	107	114	102	144
Standard Weave 3%	83	89	108	114	106	128	78	124	106	128	83	89	108	114	106	128
Standard Weave 5%	83	97	108	124	106	136	79	124	106	136	83	97	108	124	106	136
Standard Weave 10%	84	101	108	130	108	135	81	120	108	135	84	101	108	130	108	135
Suburban II	72	139	72	144	72	144	72	144	72	144	72	144	72	144	72	144
Tableaux	90	47	79	92	97	144	83	71	97	136	71	97	136	71	97	136
Thesis	70	73	70	137	70	144	70	107	70	144	70	107	70	144	70	144
Vanguard 1%	82	89	107	114	102	144	77	125	102	144	82	89	107	114	102	144
Vanguard 3%	83	89	108	114	106	128	78	124	106	128	83	89	108	114	106	128
Vanguard 5%	83	97	108	124	106	136	79	124	106	136	83	97	108	124	106	136
Venture	76	73	97	94	94	121	71	104	94	121	71	104	94	121	71	104
Wayfarer	92	144	92	144	92	144	92	144	92	144	92	144	92	144	92	144
Whitcomb	90	118	108	144	108	144	108	104	108	144	92	144	92	144	92	144
Whitehall	87	106	92	136	92	144	82	144	92	144	91	144	82	144	91	144

**NOTES:** Due to continuous manufacturing improvements, minimums and maximums are subject to change. Please call customer service for up to date size considerations.  
See dual shade section for motorization information.

## Features and Size Considerations

**120-Volt RTS**  
 Minimum Width: 24.5"  
 Minimum Height: 13"

**120-Volt Standard**  
 Minimum Width: 23"  
 Minimum Height: 13"

### Roller and Solar Shades: 120-Volt Motor Maximum Shade Size (120V RTS ST40 Motor or 120V STD ST40 Motor)

Valance Type	Normal Fabric Orientation				Contour Valance/ No Valance				Contour Valance/ No Valance at Maximum Width				Fabric Turned Width for Height (railroaded)			
	Contour Valance/ No Valance		3" Fascia		4" Fascia		Contour Valance/ No Valance		Contour Valance/ No Valance at Maximum Width		3" Fascia		4" Fascia		4" Fascia	
Fabric	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)
Allure	108	144	108	144	108	144	108	144	127	95	144	92	127	95	127	95
Arboretum BO	92	144	92	85	92	92	144	121	79	144	76	121	79	121	79	79
Arboretum LF	92	144	92	125	92	144	129	79	144	76	129	79	129	79	129	79
Banquet	85	144	85	124	85	144	129	71	144	68	129	71	129	71	129	71
Bravado BO	109	144	109	66	108	108	144	144	144	144	144	144	144	144	144	144
Bravado LF	109	144	109	81	109	109	144	144	135	135	144	135	144	135	144	135
Broadcast	117	144	117	49	101	135	135	144	134	63	144	60	134	63	134	63
Cambridge LF 76" (Ivory)	77	144	77	132	77	144	132	77	144	131	79	144	76	131	79	131
Cambridge LF 92" (Clay, Cocoa Bean, Inkwell, Misty, Off White, White)	92	144	92	132	92	144	132	92	144	125	63	144	60	125	63	125
Cambridge RD 76" (Ivory)	77	144	77	100	77	144	100	77	144	122	79	144	76	122	79	122
Cambridge RD 92" (Clay, Cocoa Bean, Inkwell, Misty, Off White, White)	92	144	92	100	92	144	100	92	144	144	144	144	144	144	144	144
Capri	71	144	71	74	71	144	71	74	71	144	Not available	144	121	121	121	121
Chronicles	97	144	97	81	97	97	144	81	97	144	Not available	97	134	134	134	134
Complex	97	144	97	59	97	97	144	59	97	144	Not available	97	131	131	131	131
Conservancy BO	111	144	96	61	113	130	113	61	130	130	Not available	130	125	125	125	125
Conservancy LF	116	144	103	71	116	144	103	71	116	144	Not available	144	122	122	122	122
Consummate Silk	78	144	78	110	78	144	78	110	78	144	Not available	78	122	122	122	122
Cumulus	97	144	97	59	97	144	97	59	97	144	Not available	97	126	126	126	126
Ellington 1%	122	144	104	71	122	144	104	71	122	144	122	144	122	144	122	144
Ellington 3%	125	144	106	74	125	144	106	74	111	144	126	144	126	144	126	144
Ellington 5%	111	144	93	74	111	144	93	74	111	144	132	144	132	144	132	144
Empire	92	144	92	125	92	144	92	125	92	144	132	144	132	144	132	144
Empirical	96	144	96	144	96	144	96	144	96	144	132	144	132	144	132	144
Emporium (All Others)	96	144	96	85	96	144	96	85	96	144	Not available	96	126	126	126	126
Emporium (Bookplate White)	96	144	96	104	96	144	96	104	96	144	Not available	96	132	132	132	132

**NOTES:** Due to continuous manufacturing improvements, minimums and maximums are subject to change. Please call customer service for up to date size considerations.

## Features and Size Considerations

**120-Volt RTS**  
 Minimum Width: 24.5"  
 Minimum Height: 13"

**120-Volt Standard**  
 Minimum Width: 23"  
 Minimum Height: 13"

### Roller and Solar Shades: 120-Volt Motor Maximum Shade Size (120V RTS ST40 Motor or 120V STD ST40 Motor)

Valance Type	Normal Fabric Orientation						Fabric Turned Width for Height (railroaded)					
	Contour Valance/ No Valance			3" Fascia			Contour Valance/ No Valance			Contour Valance/ No Valance at Maximum Width		
	Fabric	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)
Emporium (Sepia Snapshot)	96	144	96	85	96	144	144	142	144	142	144	144
Essential	70	144	70	144	70	144	144	142	144	142	144	144
Exposition	97	144	97	45	97	144	144	142	144	142	144	144
Gleam	92	144	92	94	92	92	144	144	144	144	144	144
Guildhall	97	144	97	68	97	144	144	142	144	142	144	144
Harmony	92	144	92	117	92	144	144	132	144	132	144	144
Herald	92	144	92	125	92	144	144	132	144	132	144	144
Merit	97	144	97	81	97	144	144	132	144	132	144	144
Momentum	95	144	95	55	95	144	144	132	144	132	144	144
Monticello	97	144	97	48	97	144	144	132	144	132	144	144
Opulent	96	144	96	144	96	144	144	132	144	132	144	144
Paradigm	97	144	97	55	97	144	144	132	144	132	144	144
Paragon	117	144	105	78	117	144	144	132	144	132	144	144
Plexus 1%	117	144	117	49	97	134	130	130	144	130	144	134
Plexus 3%	117	144	117	53	117	144	132	132	144	132	144	114
Plexus 5%	117	144	117	59	117	126	134	134	144	134	144	126
Prairie	108	144	108	110	108	144	144	132	144	132	144	144
Prodigy	96	144	95	49	96	108	108	108	118	108	118	108
Providence BO	111	144	94	71	111	144	144	132	144	132	144	144
Providence LF	116	144	101	85	116	144	144	132	144	132	144	144
Quintessence	117	144	109	66	117	140	140	132	144	132	144	140
Reaction	97	144	97	81	97	144	144	132	144	132	144	144
Renaissance	92	144	92	139	92	144	144	132	144	132	144	144
Resolve	97	144	97	71	97	144	144	132	144	132	144	144
Riverbend	72	144	72	53	72	144	144	132	144	132	144	144
Ruin	72	100	72	18	72	76	76	132	144	132	144	144
Sabine	97	144	97	78	97	144	144	132	144	132	144	144

**NOTES:** Due to continuous manufacturing improvements, minimums and maximums are subject to change. Please call customer service for up to date size considerations.

## Features and Size Considerations

**120-Volt RTS**  
Minimum Width: 24.5"  
Minimum Height: 13"

**120-Volt Standard**  
Minimum Width: 23"  
Minimum Height: 13"

### Roller and Solar Shades: 120-Volt Motor Maximum Shade Size (120V RTS ST40 Motor or 120V STD ST40 Motor)

Valance Type	Normal Fabric Orientation				Contour Valance/ No Valance				Contour Valance/ No Valance at Maximum Width				Fabric Turned Width for Height (railroaded)			
	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)
Saturation	96	144	96	85	96	96	144	144	Not available							
Sanguine	79	144	79	57	79	79	144	144	Not available							
Santorini	77	144	77	110	77	77	144	144	Not available							
Sedona	72	144	72	78	72	72	144	132	59	144	55	132	59	132	59	59
Shadow	120	144	116	85	120	144	144	144	Not available							
Sheffield	108	144	108	89	108	108	144	144	Not available							
Standard Weave 1%	117	144	115	78	117	117	144	138	144	138	144	115	78	138	144	144
Standard Weave 10%	117	144	116	89	117	117	144	142	144	142	144	116	89	142	144	144
Standard Weave 3%	117	144	116	78	117	117	144	139	144	139	144	116	78	139	144	144
Standard Weave 5%	117	144	115	85	117	117	144	140	144	140	144	115	85	85	140	144
Suburban II	72	144	72	124	72	144	133	59	144	55	133	59	133	59	133	59
Tableaux	97	144	97	40	97	40	97	136	Not available							
Thesis	70	144	70	63	70	70	144	144	Not available							
Vanguard 1%	117	144	115	78	117	117	144	138	144	138	144	115	78	138	144	144
Vanguard 3%	117	144	116	78	117	144	139	144	144	139	144	116	78	139	144	144
Vanguard 5%	117	144	115	85	117	144	140	140	144	140	144	115	85	85	140	144
Venture	97	144	97	63	97	63	97	135	Not available							
Wayfarer	92	144	92	144	92	144	92	144	Not available							
Whitcomb	108	144	108	104	108	108	144	140	144	140	144	115	85	140	144	144
Whitehall	92	144	92	94	92	144	123	79	144	76	123	79	123	79	123	79

**NOTES:** Due to continuous manufacturing improvements, minimums and maximums are subject to change. Please call customer service for up to date size considerations.

## Features and Size Considerations

This table provides the maximum shade size available by fabric, control type, and valance style.  
Fabric turned width for height (railroaded) may curl along its edge. This is not a defect in the product.

### Roller and Solar Shades: Dual Shades Maximum Shade Size (12V RTS R28 Motor)

Valance Type	Normal Fabric Orientation						Fabric Turned Width for Height (railroaded)					
	12-Volt Motor No Cassette/No Valance	12-Volt Motor Large Cassette	24-Volt Motor No Cassette/No Valance	24-Volt Motor Large Cassette	12-Volt Motor No Cassette/No Valance	12-Volt Motor Large Cassette at Maximum Length	12-Volt Motor No Cassette/No Valance	12-Volt Motor Large Cassette at Maximum Width	24-Volt Motor No Cassette/No Valance	24-Volt Motor Large Cassette	Width (inches)	Height (inches)
Fabric	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)
Allure	91	131	91	131	91	131	95	98	98	95	95	98
Arboretum BO	72	108	73	101	87	93	82	75	84	89	82	89
Arboretum LF	90	136	91	121	90	136	91	121	84	96	82	96
Banquet	85	134	85	119	85	134	85	119	96	74	96	74
Bravado BO	74	90	75	82	90	73	92	64	74	96	74	96
Bravado LF	79	110	80	99	96	89	97	79	Not available	Not available	Not available	Not available
Broadcast	71	70	73	63	88	56	90	49	71	70	88	56
Cambridge LF 76" (Ivory)	77	144	77	144	77	143	77	127	86	68	101	66
Cambridge LF 92" (Clay, Cocoa Bean, Inkwell, Misty, Off White, White)	92	140	92	127	92	140	92	127	84	82	84	82
Cambridge RD 76" (Ivory)	77	109	72	114	77	109	77	96	79	68	93	66
Cambridge RD 92" (Clay, Cocoa Bean, Inkwell, Misty, Off White, White)	86	109	88	96	86	109	88	96	76	84	90	82
Capri	71	101	71	91	71	82	71	72	72	72	Not available	Not available
Chronicles	85	89	71	98	85	89	87	79	79	79	Not available	Not available
Complex	71	82	72	74	87	66	89	58	58	58	Not available	Not available
Conservancy BO	57	84	59	74	70	68	72	60	60	60	Not available	Not available
Conservancy LF	64	97	65	88	77	79	78	69	69	69	Not available	Not available
Consummate Silk	78	119	78	106	78	119	78	106	106	106	Not available	Not available
Cumulus	73	82	74	74	90	66	91	58	58	58	Not available	Not available
Ellington 1%	61	97	62	88	75	79	77	69	61	97	62	88
Ellington 3%	77	82	64	91	77	82	79	72	72	72	72	72
Ellington 5%	68	82	56	91	68	82	69	72	64	91	79	79
Empire	92	136	92	121	92	136	92	121	84	84	99	82

**NOTES:** Due to continuous manufacturing improvements, minimums and maximums are subject to change. Please call customer service for up to date size considerations.  
Seams may be added to fabrics to accommodate long shade requirements. Seams will be placed as close to the tube as possible; seam location is not selectable. Seams are visible when the shade is fully extended. Not available with RU28 rechargeable motor or RU30 Simple RTS motor.

## Features and Size Considerations

This table provides the maximum shade size available by fabric, control type, and valance style.

Fabric turned width for height (railroaded) may curl along its edge. This is not a defect in the product.

Only the large cassette valance is available for the dual shade.

Small and medium cassette valances are not available.

## Roller and Solar Shades: Dual Shades Maximum Shade Size (12V RTS R28 Motor)

Valance Type	Fabric	Normal Fabric Orientation						Fabric Turned Width for Height (railroaded)							
		12-Volt Motor No Cassette/ No Valance	12-Volt Motor Large Cassette	24-Volt Motor No Cassette/ No Valance	24-Volt Motor Large Cassette	12-Volt Motor No Cassette/ No Valance	12-Volt Motor Large Cassette at Maximum Length	12-Volt Motor No Cassette/ No Valance	12-Volt Motor Large Cassette at Maximum Width	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)
Empirical	93	123	93	93	123	93	123	93	93	123	93	123	93	123	93
Emporium (All Others)	74	114	75	104	90	93	92	82	82	124	80	124	80	124	80
Emporium (Bookplate White)	89	113	74	125	89	113	91	100	100	124	80	124	80	124	80
Emporium (Sepia Snapshot)	73	111	74	103	89	93	90	82	82	124	80	124	80	124	80
Essential	70	144	70	144	70	144	70	144	70	124	80	124	80	124	80
Exposition	76	64	77	58	93	51	95	44	44	124	80	124	80	124	80
Gleam	77	102	79	90	77	102	79	90	90	124	80	124	80	124	80
Guildhall	70	87	70	85	85	76	87	67	67	124	80	124	80	124	80
Harmony	92	124	92	112	92	124	92	112	112	124	80	124	80	124	80
Herald	92	136	92	121	92	136	92	121	121	124	80	124	80	124	80
Merit	76	88	63	97	76	88	77	79	79	124	80	124	80	124	80
Momentum	74	76	75	69	90	61	92	54	54	124	80	124	80	124	80
Monticello	72	68	73	61	89	54	91	47	47	124	80	124	80	124	80
Opulent	88	133	88	133	88	133	88	133	133	124	80	124	80	124	80
Paradigm	76	76	77	69	92	61	94	54	54	124	80	124	80	124	80
Paragon	76	85	63	95	76	85	78	75	75	124	80	124	80	124	80
Plexus 1%	69	70	70	63	85	56	87	49	49	124	80	124	80	124	80
Plexus 3%	69	74	71	66	86	59	88	52	52	124	80	124	80	124	80
Plexus 5%	69	82	71	72	85	66	87	58	58	124	80	124	80	124	80
Prairie	90	119	92	106	90	119	92	106	106	124	80	124	80	124	80
Prodigy	56	70	58	63	69	56	71	49	49	124	80	124	80	124	80
Providence BO	56	97	57	88	69	78	70	69	69	124	80	124	80	124	80
Providence LF	76	93	77	82	76	93	77	82	82	124	80	124	80	124	80
Quintessence	65	90	66	82	80	73	81	64	64	124	80	124	80	124	80
Reaction	85	89	71	98	85	89	87	79	79	124	80	124	80	124	80
Renaissance	92	140	92	133	92	140	92	133	133	124	80	124	80	124	80

**NOTES:** Due to continuous manufacturing improvements, minimums and maximums are subject to change. Please call customer service for up to date size considerations.

Seams may be added to fabrics to accommodate long shade requirements. Seams will be placed as close to the tube as possible; seam location is not selectable. Seams are visible when the shade is fully extended. Not available with RU28 rechargeable motor or RU30 Simple RTS motor.

## Features and Size Considerations

This table provides the maximum shade size available by fabric, control type, and valance style.  
Fabric turned width for height (railroaded) may curl along its edge. This is not a defect in the product.

### Roller and Solar Shades: Dual Shades Maximum Shade Size (12V RTS R28 Motor)

Valance Type	Normal Fabric Orientation						Fabric Turned Width for Height (railroaded)					
	12-Volt Motor No Cassette/No Valance		12-Volt Motor Large Cassette		24-Volt Motor No Cassette/No Valance		12-Volt Motor Large Cassette		12-Volt Motor No Cassette/No Valance at Maximum Length		12-Volt Motor Large Cassette at Maximum Width	
	Fabric	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)
Resolve	71	97	73	87	87	79	89	69	69	Not available	Not available	Not available
Riverbend	72	74	72	67	72	59	72	52	52	Not available	Not available	Not available
Rujin	72	31	72	27	72	23	72	20	20	Not available	Not available	Not available
Sabine	85	85	71	91	85	85	87	75	75	Not available	Not available	Not available
Salutation	80	114	81	104	96	93	96	82	82	Not available	Not available	Not available
Sanguine	71	79	72	71	79	63	79	56	56	Not available	Not available	Not available
Santorini	77	135	77	132	77	119	77	106	106	Not available	Not available	Not available
Sedona	72	105	72	95	72	85	72	75	75	Not available	Not available	Not available
Shadow	84	93	71	97	84	93	86	82	82	Not available	Not available	Not available
Sheffield	78	120	80	108	95	98	97	86	86	Not available	Not available	Not available
Standard Weave 1%	83	85	70	89	83	85	85	75	83	85	85	85
Standard Weave 3%	84	85	71	87	84	85	86	75	84	86	86	86
Standard Weave 5%	83	93	70	99	83	93	86	82	93	86	86	82
Standard Weave 10%	84	98	71	100	84	98	86	84	98	86	86	86
Suburban II	72	144	72	144	72	134	72	119	100	62	100	62
Tableaux	73	58	74	52	90	45	92	40	40	Not available	Not available	Not available
Thesis	70	87	70	79	70	70	62	62	62	Not available	Not available	Not available
Vanguard 1%	83	85	70	89	83	85	85	75	83	85	85	75
Vanguard 3%	84	85	71	87	84	85	86	75	84	85	86	75
Vanguard 5%	83	93	70	99	83	93	86	82	93	86	86	82
Venture	62	87	63	79	76	70	78	62	62	100	62	100
Wayfarer	92	144	92	144	92	144	92	144	144	Not available	Not available	Not available
Whitcomb	91	113	76	125	91	113	93	100	100	Not available	Not available	Not available
Whitehall	88	102	73	113	88	102	89	90	90	77	84	91
										91	82	91
										82	91	82
										82	91	82

**NOTES:** Due to continuous manufacturing improvements, minimums and maximums are subject to change. Please call customer service for up to date size considerations.  
Seams may be added to fabrics to accommodate long shade requirements. Seams will be placed as close to the tube as possible; seam location is not selectable. Seams are visible when the shade is fully extended. Not available with RU28 rechargeable motor or RU30 Simple RTS motor.

## Features and Size Considerations

### Exterior Solar Shades Motorized Lift

Order Entry: 120V Motor 3-Wire RTS



Refer to individual product information guide for specific option and size information for the product being ordered.

#### Features

- Operate exterior shades virtually anywhere around the home, up to 65 foot RTS range
- Provides easy operation of outdoor living space shades
- Manages harsh sun glare and solar heat, assists with temperature control
- Blocks damaging UV rays while maintaining outdoor view
- Motor located on the left or right side, standard on right
- Powered with 10 foot power cable; optional outdoor-rated plug
- Available with large cassette only, choose Brown (873), Vanilla (970), White (871), or Black (939)
- Available as standard roll only
- Stainless steel guide cables and unique universal cable locks (sill, jam, or wall mounted) are included

#### Control and Power Options

- Multiple control and power options available; see options section for availability

Size Considerations				
Motor Type	Order Entry	Minimum Width (inches)	Minimum Height (inches)	Light Gap Per Side (inches)
Exterior 120-Volt RTS	120V Motor 3-Wire RTS	32	13	1 to 1½

### Exterior Solar Shades: Maximum Shade Size

Fabric	Normal Fabric Orientation		Fabric Turned Width for Height (railroaded)			
	120-Volt Motor Large Cassette		120-Volt Motor Large Cassette		120-Volt Motor Large Cassette at Maximum Width	
	Width (inches)	Height (inches)	Width (inches)	Height (inches)	Width (inches)	Height (inches)
Broadcast	117	144	127	144	144	74
Chronicles	97	144			Not available	
Merit	97	144			Not available	
Monticello	97	144	141	81	144	72
Paradigm	97	144			Not available	
Plexus 1%	117	144	123	144	144	74
Plexus 3%	117	144	125	144	144	80
Plexus 5%	117	144	127	144	144	88
Reaction	97	144			Not available	
Resolve	97	144			Not available	
Standard Weave 1%	117	144	130	144	144	117
Standard Weave 3%	117	144	131	144	144	117
Standard Weave 5%	117	144	133	144	144	128
Standard Weave 10%	117	144	135	144	144	134
Vanguard 1%	117	144	130	144	144	117
Vanguard 3%	117	144	131	144	144	117
Vanguard 5%	117	144	133	144	144	128
Venture	97	144			Not available	

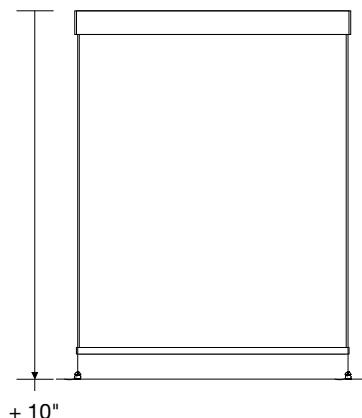
Due to continuous manufacturing improvements, minimums, and maximums are subject to change. Please call customer service for up to date size considerations.

**NOTE:** These tables provide the maximum shade size available by fabric and cassette.

Seams may be added to fabrics to accommodate long shade requirements. For shades longer than material width, seams will be visible when the shade is fully extended. Refer to exterior solar shades product information guide for pricing.

## Features and Size Considerations

### Guide Cables (motorized exterior shades only)



Use the following guidelines to determine the guide cable length that will be provided with your shade.

- Add 10" to the shade height to determine guide cable length
- Cable lengths available are: 54", 80", 144", and 186"
- The next longest cable length will be supplied with your measurement
- All cables are stainless steel and include cable locks
- Cables can be cut to length at time of installation

**EXAMPLE:** Shade height is 95". Adding 10" = 105".  
Shade will come with a guide cable at 144".

## Options

### 12-Volt Power Considerations

12-volt motors can be powered by batteries, solar power kit, plug-in transformer, or multi-motor power supply. Below are some considerations when planning for power.

#### Battery Tube Considerations

**For best performance, orders of 10 or more are recommended to use plug-in transformers.**

Battery tubes are installed outside of the product and can be challenging to hide in some applications.

- For outside mounts, battery tubes can be installed above or to the side of the shade
- For inside mounts, battery tubes are usually top-mounted (behind the headrail) between the shade and the window; to mount the battery tubes, additional recessed space will be needed

Dual battery tubes are recommended for best performance based on motor type, shade size and fabric type. See individual product page for recommendations.



Outside Mount



Inside Mount

### Low Voltage 12-Volt Power Components

	<p><b>Battery Tubes for Somfy RTS Motors (CL32, R28 and Tilt Motor Types)</b></p> <ul style="list-style-type: none"><li>• Reloadable and are available with or without batteries</li><li>• 8 AA lithium batteries</li><li>• Each tube includes 2 battery clips</li><li>• Optional 48" or 96" extensions available</li><li>• For best performance, use only AA lithium batteries (each tube requires 8 AA lithium batteries)</li></ul> <p><b>Battery Tube Dimensions:</b> 18" x 1 1/8"</p> <p><b>Dual Battery Tube Dimensions:</b> 18" x 2 1/4" (installed side-by-side) 36" x 1 1/8" (installed end-to-end) product flush mount + 1 1/8"</p> <p><b>Single Battery Tube with Flush Mount:</b> product minimum recessed space + 1 1/8"</p> <p><b>Single Battery Tube Minimum Recessed Space:</b> product flush mount + 2 1/4"</p> <p><b>Dual Battery Tube with Flush Mount:</b> product flush mount + 2 1/4"</p> <p><b>Dual Battery Tube Minimum Recessed Space:</b> product minimum recessed space + 2 1/4"</p> <p><b>NOTE:</b> For best performance, use only AA lithium batteries.</p>
	<p><b>Battery Tubes for Simple Motor (CL30 and RU30 Motor Types)</b></p> <ul style="list-style-type: none"><li>• Reloadable and are available with or without batteries</li><li>• 10 AA alkaline batteries</li><li>• Each tube includes two battery clips</li><li>• Optional 48" or 96" extensions available</li><li>• Dual tubes include an offset Y harness 11" and 27 1/4" cable lengths</li></ul> <p><b>Battery Tube Dimensions:</b> 21 1/4" x 1 1/8"</p> <p><b>Battery Tube with Flush Mount:</b> product flush mount + 1 1/8"</p> <p><b>Battery Tube Minimum Recessed Space:</b> product minimum recessed space + 1 1/8"</p> <p><b>Dual Battery Tube with Flush Mount:</b> product flush mount + 2 1/4"</p> <p><b>Dual Battery Tube Minimum Recessed Space:</b> product minimum recessed space + 2 1/4"</p>

# Options

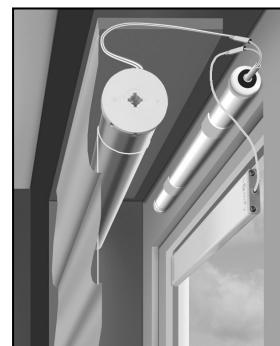
## Low Voltage 12-Volt Power Considerations

### Solar Power Kit Considerations

The solar panel mounts indoors directly to the glass with included adhesive strips or using provided mounting brackets. Verify window is unobstructed to sunlight by vegetation, decorative grills, or bug screens. Window construction can be non-tinted, single or double pane, which have a minimum of 65% light transmission for proper solar charging.

**Kit Includes:** Solar panel, battery tube and 10 AA NiMH rechargeable batteries, Y harness, battery tube clips, solar panel mounting brackets, glass-mount adhesive strips, alcohol wipe, and instructions.

- For outside mounts, battery tube can be installed above or to the side of the shade and the solar panel can be installed directly against the window within reach of the wire harness (approximately 10" Y harness)
- For inside mounts, battery tube and solar panel can be top-mounted (behind the headrail) or to the side of the shade (vertical orientation) between the shade and the window; additional recessed space will be needed



Solar Power Kit

**Battery Tube Dimensions:** 21 $\frac{1}{4}$ " x 1 $\frac{1}{8}$ "

**Solar Panel Dimensions:** 12" x 1 $\frac{1}{2}$ "

**Battery Tube with Flush Mount:** product flush mount + 1 $\frac{1}{8}$ "

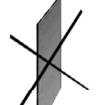
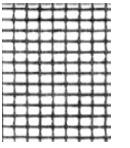
**Battery Tube Minimum Recessed Space:** product minimum recessed space + 1 $\frac{1}{8}$ "

### Solar Power Kit for Somfy RTS 12V Motors (CL32, R28 and Tilt Motor Types)

- Patented energy-saving technology uses sunlight to power the motorized window covering
- The battery tube houses 10 AA NiMH rechargeable batteries, tube length 21 $\frac{1}{4}$ " x 1 $\frac{1}{8}$ " in diameter
- Not available with shades over 96" height
- Maintenance-free solution that doesn't require the use of an electrician
- Convenient and cost effective; reduces battery replacement and preserves the environment
- Easy to install for new and existing window covering installation
- Solar (photovoltaic) panel is low profile and easy to conceal (adhesive mounting strips or mounting brackets are included)
- Batteries can be recharged with any NiMH AA battery charger
- The solar power kit is fully charged at the time of shade fabrication and should be installed within one week; if installation is delayed, place the solar panel with filled battery tube in location that gets periodic sunlight to maintain the charge



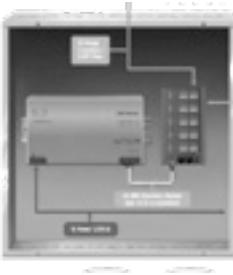
### Window Application Guidelines for Solar Power Kit

<b>Window Type</b>	 Single or Double Pane OK	 Light Transmission 65% or Greater	 Window Tinting	 Inside Window Only	<b>Avoid</b>	 Awnings or Deep Roof Eaves	 Window Dividers/Overlapping Solar Panel
<b>Moving Window</b>	 Fixed Window	 Double Hung	 Sliding	 Casement		 Vegetation Blocking Light	 Bug Screens
<b>Concern</b>	Clean Install	Caution: Avoid Panel Collision	Caution: Avoid Panel Collision	Caution: Panel Movement will Tug or Tear Harness			
<b>Suggestions</b>		Limit Screw in Track	Limit Screw in Track	Cable Tie Near Corner			

For complete guidelines, visit [graberdirect.com](http://graberdirect.com) and download installation and performance chart for solar power kit.

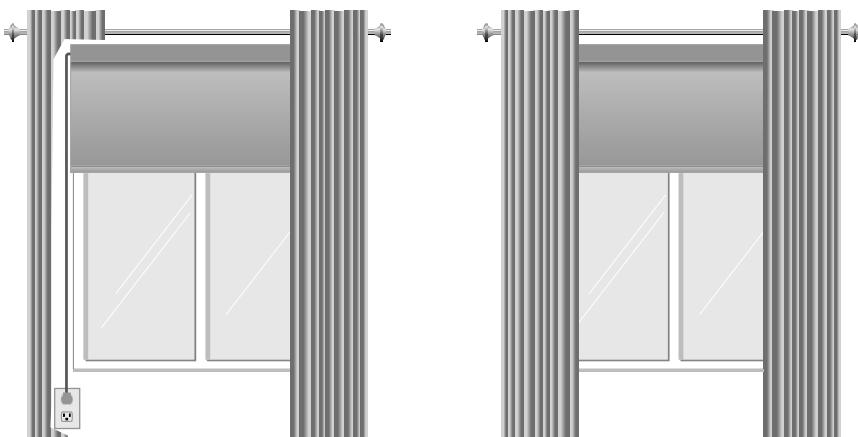
## Options

### Low Voltage 12-Volt and 24-Volt Power Considerations

	<p><b>Plug-In Transformer</b></p> <ul style="list-style-type: none"><li>• Eliminates the need for batteries</li><li>• Available in White only</li><li>• 12-volt (CL32, CL30, R28, RU30, Tilt): 72" power cord and 96" extension cable (power cord and extensions cannot be cut to length)</li><li>• 24-volt (ST30): 96" motor lead and 60" power cord (cord can be cut to length)</li></ul> <p><b>Transformer Dimensions</b></p> <ul style="list-style-type: none"><li>• 12-volt: 3½" wide x 2" deep (not including plug) x 1½" high (as you look at the plug in the outlet)</li><li>• 24-volt: 1¾" wide x 1⅝" deep (not including plug) x 2¾" high (as you look at the plug in the outlet)</li></ul> <p><b>NOTE:</b> Due to the many variations of installations, wire management components are not included with your motorized shade system. There are numerous wire management products available at your local hardware store or home improvement center to help disguise the power cord when using a plug-in transformer. An example of a popular wire management accessory is wire channel. Wire channel is a vinyl sheathing that can be placed along the window casing or wall that will house and conceal exposed wiring for a clean and professional appearance.</p>
	<p><b>Multi-Motor Power Supply</b></p> <ul style="list-style-type: none"><li>• Used when hard-wiring the transformer and direct wiring the motorized window coverings</li><li>• Each motor is "home run" wired back to the multi-motor power supply</li><li>• Power supply includes instructions and connection cables</li><li>• Must be mounted indoors, NEMA rated</li><li>• 120-volt AC 3.3 amp</li></ul> <p><b>Multi-Motor Power Supply Considerations</b></p> <p>Transformer enclosure is generally mounted in an accessible indoor location such as a basement, utility closet, or garage. Motors are "home run" wired to the panel using 16-gauge wire.</p> <ul style="list-style-type: none"><li>• Dimensions: 12" wide x 6" deep x 12" high</li><li>• Additional wire may be purchased locally; up to 150 feet maximum</li></ul> <p><b>CAUTION:</b> A licensed electrician is required for all line voltage electrical connections. All local and NEC codes must be followed.</p> <p><b>12-Volt:</b> 10 motor power supply kit available</p> <p><b>24-Volt:</b> 5 or 10 motor power supply kits available</p>

#### DC Plug-In Transformer Considerations

- A power outlet must be within cord length to power motor
- Transformer power recommended for shade systems of any size or quantity



## Options

### 12-Volt Power Consideration for Rechargeable Motor

Shades will need charging on-site before installation.

	<p><b>DC Plug-In Charger</b></p> <ul style="list-style-type: none"><li>• Sold separately</li><li>• Used with 12V RU28 rechargeable motor</li><li>• 6 foot power cord white only</li><li>• Recommend one charger per order and for orders with more than 3 shades, recommend an additional charger</li><li>• Charge time up to 4.5 hours</li><li>• LED indicator illuminates as follows:<ul style="list-style-type: none"><li>• Solid Red - charging</li><li>• Solid Orange - charging almost complete</li><li>• Solid Green - charging complete</li></ul></li></ul>
	<p><b>Extension Cable</b></p> <ul style="list-style-type: none"><li>• Sold separately</li><li>• 94" extension cable</li><li>• One extension per charger</li><li>• White only</li></ul>

# Options

## 120-Volt Power Considerations

120-volt motors utilize the home or building's line voltage. Below are some considerations when planning for power.

**CAUTION:** A licensed electrician is required for all electrical connections. All local and NEC codes must be followed.

### Radio Frequency 120-Volt Motors

Radio frequency-controlled motors are either hard-wired or plugged into line voltage. Any variety of RF controls can be used to achieve your desired control scenarios: remotes, wall switches, or timers. When installing a radio frequency-controlled line voltage motor, you have three options for electrical connection:

1. 3-prong plug: Plug into a prewired outlet. This is the simplest method; however, it requires the outlet be located within range of the motor cord. Do not use an extension cord.
2. Junction box lead: Use a junction box lead that can be hardwired to a nearby junction box. Requires the junction box to be located within range.
3. Custom plug plate: Plate to be installed nearby single gang junction box using the quick disconnect prewired to motor lead. Option best suited for commercial projects.

#### Interior Radio Frequency 120-Volt Power Options

- 3 foot power cord with 3-prong plug
- 10 foot power cord with 3-prong plug
- 3 foot motor lead with 8 foot junction box lead and quick disconnect
- 10 foot motor lead with quick disconnect and plug plate
- 3 foot motor lead with quick disconnect and plug plate

#### Exterior Radio Frequency 120-Volt Power Options

- 10 foot power cord
- 10 foot power cord with 3-prong plug (field attached)



### Standard 120-Volt Motors

When installing a standard line voltage motor, both power and control are hard-wired to the motor. Control is provided via wall switches or dry contact outputs provided by certain home and building automation packages. Standard motor configuration options are:

#### Standard Motor Options

- 18 inches motor lead with 8½ foot junction box lead and quick disconnect
- 18 inches motor lead with quick disconnect and plug plate
- 10 foot motor lead with quick disconnect and plug plate

## Options

Motorized Graber® Blinds and Shades feature Somfy® Radio Frequency Motors and Accessories. All Somfy Radio Frequency Motors utilize Somfy's Proprietary Protocol Radio Technology Somfy® (RTS).

### Radio Frequency Controls (RTS range 65 feet)

	<p><b>Telis Handheld Remotes</b></p> <ul style="list-style-type: none"> <li>• Compatible with all Somfy RTS motors</li> <li>• Used to control single blinds/shades on each channel or group blinds/shades performing the same function</li> <li>• Battery included</li> <li>• Remote includes convenient mounting hardware for hanging when not in use</li> </ul> <p><b>Telis 1, Single-Channel Remote</b> Available colors:  <ul style="list-style-type: none"> <li>• Interior: White, Silver, Black</li> <li>• Exterior: Patio Blue</li> </ul> </p> <p><b>Telis 4, Five-Channel Remote</b> Available colors:  <ul style="list-style-type: none"> <li>• Interior: White, Silver, Black</li> <li>• Exterior: Patio Blue</li> </ul> </p>
	<p><b>Telis 16, Sixteen-Channel Handheld Remote</b></p> <ul style="list-style-type: none"> <li>• Compatible with all Somfy RTS motors</li> <li>• Used to control a single blind/shade on each channel or group blinds/shades performing the same function</li> <li>• Convenient display provides easy identification of shade(s) being controlled</li> <li>• Battery included</li> <li>• Remote includes convenient mounting hardware for hanging when not in use</li> <li>• Available colors: Interior only—White, Silver</li> </ul>
	<p><b>Telis Modulis Handheld Remotes</b></p> <ul style="list-style-type: none"> <li>• Compatible with all Somfy RTS motors</li> <li>• Used to control a single blind/shade on each channel or group blinds/shades performing the same function</li> <li>• Scroll interface allows for precise adjustment for blinds/shades, ideal for fine control horizontal blinds, layered, and sheer shades</li> <li>• Battery included</li> </ul> <p><b>Telis 1 Modulis, Single-Channel Remote</b> Available colors:  <ul style="list-style-type: none"> <li>• Interior: White</li> </ul> </p> <p><b>Telis 4, Five-Channel Remote</b> Available colors:  <ul style="list-style-type: none"> <li>• Interior: White</li> </ul> </p>
	<p><b>Situo RTS Single-Channel Remote</b></p> <ul style="list-style-type: none"> <li>• Compatible with all Somfy RTS motors</li> <li>• Used to control single blinds/shades on each channel or group blinds/shades performing the same function</li> <li>• Battery included</li> <li>• Remote includes convenient mounting hardware for hanging when not in use</li> <li>• Single-channel remote</li> </ul>
	<p><b>DecoFlex Wireless Wall Switches</b></p> <ul style="list-style-type: none"> <li>• Compatible with all Somfy RTS motors</li> <li>• Used to control a single blind/shade on each channel or group blinds/shades performing the same function</li> <li>• Switches include button labels and mounting hardware to flush mount in drywall (wireless)</li> <li>• Battery included</li> </ul> <p><b>Single-Channel Wall Switch</b> Available colors:  <ul style="list-style-type: none"> <li>• Interior: White, Ivory, Black</li> </ul> </p> <p><b>Five-Channel Wall Switch</b> Available colors:  <ul style="list-style-type: none"> <li>• Interior: White, Ivory, Black</li> </ul> </p>
	<p><b>DecoFlex Table Top Remotes</b></p> <ul style="list-style-type: none"> <li>• Compatible with all Somfy RTS motors</li> <li>• Used to control a single blind/shade on each channel or group blinds/shades performing the same function</li> <li>• Switches include button labels</li> <li>• Battery included</li> </ul> <p><b>Single-Channel Table Top Remote</b> Available colors:  <ul style="list-style-type: none"> <li>• Interior: Silver, Black, White</li> <li>• Silver and Black include Black wall switch</li> <li>• White includes White wall switch</li> </ul> </p> <p><b>Five-Channel Table Top Remote</b> Available colors:  <ul style="list-style-type: none"> <li>• Interior: Silver, Black, White</li> <li>• Silver and Black include Black wall switch</li> <li>• White includes White wall switch</li> </ul> </p>

## Options

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### Integration Devices

	<p><b>Universal RTS Interface—URTSI II</b></p> <p>The addressable Universal RTS Interface can be used to communicate between home automation or other third party systems and all Somfy (RTS) motors and controls. It is capable of individual or group control and can be operated via Infrared Remote, RS232, or RS485 serial communication. Once an input is activated, an RTS radio command is sent to the motorized window treatment. Up to 16 addressable channels are available.</p> <ul style="list-style-type: none"> <li>• Used for third party integration of all Somfy RTS motors, including both line (120-Volt A/C) and low voltage systems</li> <li>• Converts IR/RS232/RS485 to control all Somfy Radio Frequency (RTS) motors</li> <li>• 65 foot RTS range</li> <li>• Power: 9-volt to 15-volt DC, 200mA draw for each universal interface—transformer included</li> <li>• Up to 16 URTSI II's can be used in one system</li> </ul>
	<p><b>Single-Channel Dry Contact to RTS Interface (includes power cord)</b></p> <p>The Somfy Single-Channel RTS dry contact interface communicates with all RTS motors and can only be controlled by dry contact. It operates as a single-channel Telis remote controller, providing UP, DOWN and STOP functions along with a "MY" or customer-preferred shade setting. The RTS (RF) technology controls all RTS devices within a 65 foot range. This device is enclosed in a weatherproof mounting case for indoor and outdoor operation.</p> <ul style="list-style-type: none"> <li>• Single-channel RTS control for all Somfy RTS motors</li> <li>• Controlled with dry contacts</li> <li>• Powered by 3-volt lithium battery (included)</li> <li>• Knockout holes in back and bottom of weatherproof case</li> <li>• Dimensions: 6" wide x 4<math>\frac{1}{4}</math>" high x 2<math>\frac{1}{4}</math>" deep</li> </ul>
	<p><b>mylink™ WiFi to RTS Interface</b></p> <p>The mylink WiFi to Radio Technology Somfy® interface is a WiFi to RTS bridge that can control up to 16 channels of RTS motorized products using the Somfy mylink apps for iOS and Android devices. Through the app, users can send immediate RTS commands, create scenes (a group of motorized products working together), and schedules (timed events). Users may access their mylinks from anywhere with the apps' remote access feature. Users are able to control through Amazon Echo voice control devices. Though the mylink is a single-zone controller, 35 foot range multiple mylinks can be joined within the same system for multi-zone control. The mylink can also serve as an IP to RTS bridge for 3rd party control systems.</p> <ul style="list-style-type: none"> <li>• Dimensions: 2<math>\frac{1}{4}</math>" wide x 4<math>\frac{1}{8}</math>" high x 1<math>\frac{1}{2}</math>" deep</li> </ul>

## Options

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### Specialty Radio Frequency Controls

	<p><b>Telis 1 Chronis RTS Timer</b></p> <ul style="list-style-type: none"><li>• Compatible with all Somfy RTS motors</li><li>• Used to control a single blind/shade or group of blinds/shades performing the same function</li><li>• Schedule one open and one closed function per day with different scheduled operation for weekend and weekdays</li><li>• Convenient display provides easy identification of shade(s) being controlled</li><li>• Battery included</li><li>• Remote includes convenient mounting hardware for hanging when not in use</li><li>• Available colors: White</li></ul>
	<p><b>Sunis Sun Sensor</b></p> <p>The Somfy Sunis RTS Sun Intensity Sensor is a wireless transmitter compatible with RTS motorized window coverings. Window or sill mounted, the Sunis RTS operates motorized window coverings in accordance to the sun intensity. Sensitivity (threshold) settings can be adjusted to accommodate various sunlight intensity and room temperatures to provide the ultimate in comfort and protection from harmful UV rays.</p> <p>The Somfy Sunis RTS controller communicates with all Somfy RTS controllable devices. The Sunis is a wireless, battery-powered, single-channel RF programmable controller for an unlimited number of Somfy RTS motors. All motors assigned to the Sunis will operate simultaneously. When used with the Somfy RTS shade motors, the Sunis will open or close the shades based on the amount of sun reaching the sensor.</p> <ul style="list-style-type: none"><li>• Two-position suction cup mounting</li><li>• Mounts to glass or windowsill</li><li>• Powered by 3-volt lithium battery (included)</li><li>• Controls unlimited RTS motors</li><li>• Controls RTS motors based on sun intensity</li><li>• Operating temperature: 32°F to 140°F</li><li>• INDOOR USE ONLY</li><li>• Dimensions: 2<math>\frac{1}{16}</math>" diameter x <math>\frac{3}{4}</math>" deep</li></ul>
	<p><b>(RTS) Repeater—Range Expander</b></p> <p>The Repeater extends the range of all Somfy RTS controllers. Devices or motors that might have been previously out of range from an RTS transmitter can now be controlled by adding the RTS Repeater. The RTS Repeater should be placed approximately halfway between the RTS Somfy motor and controller. An LED is provided for confirmation that the unit is receiving the RTS. Repeater has the same typical range of other transmitters at approximately 65 feet and plugs directly into any household AC outlet.</p> <ul style="list-style-type: none"><li>• Communicates with all Somfy (RTS) devices/motors</li><li>• Range expander: strengthens and extends the radio frequency signal (RTS) from control to motor</li><li>• Plug and play: plugs directly into any AC-Outlet; no programming needed</li><li>• LED feedback</li><li>• Controls unlimited number of shades simultaneously</li><li>• Dimensions: 2<math>\frac{1}{8}</math>" wide x 4<math>\frac{1}{8}</math>" high x 1.275" deep (without antenna)</li></ul>

## Options

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### Exterior Solar Shade Motorization Controls

	<p><b>Telis 1 Single-Channel RTS Remote Exterior, Wirefree: Patio (White and Blue)</b> Somfy's Telis single-channel remote is compatible with all radio frequency motors. For exterior shades, use to control a single blind or group of blinds/shades performing the same function from up to 65 feet away. It is compatible with DecoFlex wall switches and the Chronis Comfort timer. A great way to operate blinds/shades without a direct line of sight. Compatible with the RF wind sensor. Water resistant and shock proof for outdoor use. Battery included.</p>
	<p><b>Telis 4 Five-Channel RTS Remote Exterior, Wirefree: Patio (White and Blue)</b> Somfy's Telis 4, five-channel remote is compatible with all radio frequency motors. For exterior shades, use to control multiple blinds/shades independently, in a group setting, or multiple groups from up to 65 feet away. It is compatible with DecoFlex wall switches and the Chronis Comfort timer. Perfect for controlling blinds/shades in multiple rooms. Compatible with the RF wind sensor. Water resistant and shock proof for outdoor use. Battery included.</p>
	<p><b>Eolis RTS Wind Sensor</b> The Somfy's Eolis RTS wind sensor is a radio wind sensor for exterior motorized lift shades. The sensor detects a wind threshold and automatically raises the shades. The wind threshold is adjustable. Powered by plugging into a 120-volt electrical outlet. Exterior-rated fasteners are not included.</p>
	<p><b>Exterior-Rated Plug</b> Optional black electrical 3-wire plug, 15 amp, to be used with a GFCI outlet. This allows the shade to be plugged in versus hard-wired.</p>

## Options

### Standard Motor 120-Volt Controls

	<p><b>Maintained DP-DT Paddle Switch</b></p> <ul style="list-style-type: none"> <li>• Controls one or two shades as a stand-alone control</li> <li>• 120-volt A/C</li> <li>• Available colors: White, Ivory</li> </ul>
	<p><b>Group Control System (GCS-II)</b></p> <p>The Group Control System-II (GCS-II) permits low voltage control of up to four Somfy® motors with one or more switches, from one or more locations. The GCS-II offers only group control, and does not have the capability of operating each motor individually. The Group Control System-II is UL and cUL approved.</p> <ul style="list-style-type: none"> <li>• Enclosure measures 8" wide x 10" high x 4" deep</li> <li>• SP-DT paddle switch sold separately</li> </ul>
	<p><b>Maintained SP-DT Paddle Switch</b></p> <ul style="list-style-type: none"> <li>• Controls one shade as a stand-alone or in conjunction with a GCS-II multi-motor control for up to four motor operation</li> <li>• 120-volt A/C</li> <li>• Available colors: White, Ivory</li> </ul>
	<p><b>IGC 4n1 Motor Group Control</b></p> <ul style="list-style-type: none"> <li>• Control up to four WT motors individually or in groups</li> <li>• Provides default intermediate positions: 25%, 50%, 75% openness</li> <li>• Three customizable intermediate positions per motor</li> <li>• Individual control and master control using DecoFlex IGC/4N1 Keypads</li> <li>• Four keypad ports and two master ports</li> <li>• IGC 4n1 switch sold separately</li> </ul>
	<p><b>RTS to IGC 4n1 Receiver</b></p> <ul style="list-style-type: none"> <li>• Receiver allows RTS remotes to be added to the standard four wire motor control and motors</li> </ul>
	<p><b>IGC 4n1 Switch</b></p> <ul style="list-style-type: none"> <li>• Designed to be used with the IGC 4n1 motor group controller</li> <li>• Six button control, three intermediate positions, up, stop, and down</li> <li>• Available colors: White</li> </ul>
	<p><b>Motor Tester Cable</b></p> <p>The motor tester cable is used for any 120-volt motor with the wago quick disconnect. The cable allows adjusting limits on standard motors and can provide alternate power for radio frequency and intelligent motors. Motor tester cable includes switch and wago quick disconnect plug.</p> <ul style="list-style-type: none"> <li>• Dimensions 2.5" wide x 3" high x 2" deep</li> </ul>

# GRABER®

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