R-TEC AUTOMATION® by Rowley®

SHADE DATABOOK
R-TEC Automation® 5v Shade Motors

R-TEC Automation® is a convenient, comfortable, lifestyle solution that integrates smart technology solutions allowing you to conveniently control window treatments throughout the home.

The R-TEC Automation® Hub and App integration allow window treatments to be controlled directly from a smartphone or integrated device while at home or away. As an alternative, remotes and wall switches allow for individual, group and all control for a customized solution with 1, 2, 5 or 15 channel options.

TABLE OF CONTENTS

SHADE MOTORS

This document presents the technical information for our R-TEC Automation® Shade Motors and related R-TEC Smart Controls. It provides detailed information to facilitate the specification of these motor solutions and presents information regarding options for designer applications. Visit RowleyCompany.com for more information on the entire R-TEC Automation® product line of Motors, Power Sources, R-TEC Smart Controls and more.
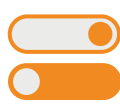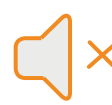
FEATURES

| 2-Way RF Communication | Leveling Control | Preferred Upper / Lower Limit Settings | Favorite Position | Adjustable Speed | Quiet Operation |

MOTOR SPECS

See spec sheets for more details on each motor type

	Voltage	Sound Level	Max. Run Time
Wirefree Tubular Motors	5 V DC	~44 DB to ~53 DB	10 min.
DC Tubular Motors	12 V DC	~36 DB to ~53 DB	6 min. - 10 min.

MOTOR PERFORMANCE ON SHADES

	Tube Dia.	Max. Size	Min. Roller Shade Width / Roller Tube Length	Min. Roman Shade Width / Dustboard Length	Max. Load
Wirefree Tubular Motor 25 mm Short	1 1/4"	84" x 84"	22"	23 1/2"	15 1/2 lbs.
	1 1/2"	84" x 84"	22"	23 1/2"	13 lbs.
Wirefree Tubular Motor 25 mm	1 1/4"	84" x 84"	25"	26 1/2"	15 1/2 lbs.
	1 1/2"	84" x 84"	25"	26 1/2"	13 lbs.
Wirefree Tubular Motor 28 mm	1 1/2"	120" x 120"	28 1/2"	30"	23 1/2 lbs.
	2"	120" x 120"	28 1/2"	30"	17 1/2 lbs.
Wirefree Tubular Motor 35 mm	2"	120" x 120"	37"	39"	26 1/2 lbs.
DC Tubular Motor 25 mm	1 1/4"	84" x 84"	16 1/2"	18"	15 1/2 lbs.
	1 1/2"	84" x 84"	16 1/2"	18"	13 lbs.
DC Tubular Motor 28 mm	1 1/2"	120" x 120"	22"	23 1/2"	23 1/2 lbs.
	2"	120" x 120"	22"	23 1/2"	17 1/2 lbs.
DC Tubular Motor 35 mm	2"	120" x 120"	23 1/2"	25"	26 1/2 lbs.

APPLICATIONS
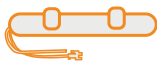See spec sheets for more details on each motor type

Roller Shade | Roman Shade | Narrow Applications

POWER OPTIONS

Battery Powered | Battery Pack | Battery Tube | Power Supply

SOLAR

Solar Panel Battery Charger

R-TEC SMART CONTROLS

Handheld Remotes 1, 5 or 15 Channel | Surface Mount Wall Switch 5 Channel | Cut-In Wall Mount Switches 1, 2 or 15 Channel
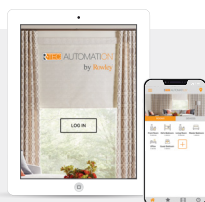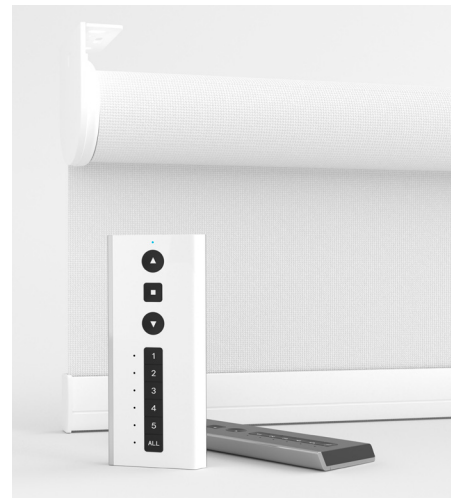
Wi-Fi to ARC Bridge Hub, 2-way RF | Interior Sun Sensor | ARC USB Signal Repeater & Charger

The Hub and R-TEC Automation® App integration allow window treatments to be controlled directly from a smartphone or integrated device while at home or away. Available on the Apple® App Store or Google Play™.
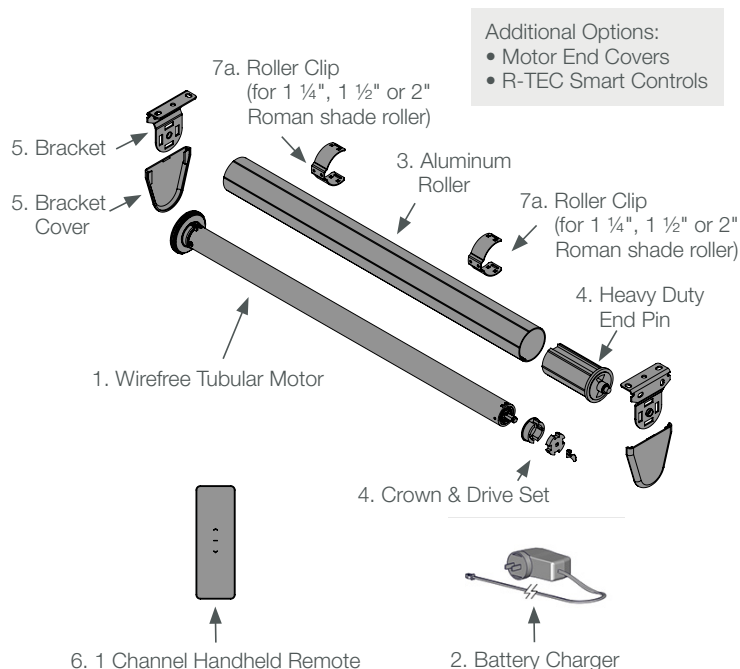
| 800.343.4542

R-TEC AUTOMATION® by Rowley

WIREFREE TUBULAR MOTORS

PARTS LIST

1. Wirefree Tubular Motor
   a. 25 mm Motor Size: RTM5VL25S
   b. 25 mm Motor Size: RTM5VL25
   c. 28 mm Motor Size: RTM5VL28
   d. 35 mm Motor Size: RTM5VL35
2. Battery Charger RTMLDSSBC or RTMSOLAR2
3. Aluminum Roller
   a. Length Options: 4', 6', 8', 12' or 16'
   b. Roller Size: 1 ¼", 1 ½" or 2"
4. Drive Set Kit - matches Motor & Aluminum Roller Size
5. Brackets & Bracket Covers (covers are optional for Roller Shade only)
6. R-TEC Smart Controls: Custom systems include 1 Channel Handheld Remote with Wall Mount. Additional control options shown on pages 18 - 19.
7. Additional Roman or Roller Components:
   a. If building Roman Shade:
      • Lift Band Shade - Lift Band Material, Fiberglass Ribs, Rib Center Support Rings & End Caps & Weight Bar
      • Lift Cord Shade - Soft Shade Roller Clips, Encased Lift Cord Shroud Tube & Weight Bar
   b. If building Roller Shade:
      • Weight Bar

Additional Options:
• Motor End Covers
• R-TEC Smart Controls

7a. Roller Clip (for 1 ¼", 1 ½" or 2" Roman shade roller)
5. Bracket
5. Bracket Cover
3. Aluminum Roller
7a. Roller Clip (for 1 ¼", 1 ½" or 2" Roman shade roller)
4. Heavy Duty End Pin
1. Wirefree Tubular Motor
4. Crown & Drive Set
6. 1 Channel Handheld Remote
2. Battery Charger

Installation Instructions:
25 mm or 28 mm   35 mm

MOTOR & POWER OPTION DIMENSIONS

Wirefree Tubular Motor

Motor Length
Motor Diameter
X

	Motor Size	Motor Length	Motor Diameter	X	Cable / Antenna
RTM5VL25S	25 mm	18 7/8"	1"	5/16"	–
RTM5VL25	25 mm	21 3/4"	1"	5/16"	–
RTM5VL28	28 mm	25 9/16"	1 1/8"	5/16"	–
RTM5VL35	35 mm	33 1/2"	1 3/8"	3/8"	7 1/16" 6 5/16"
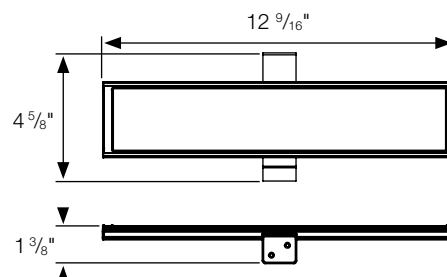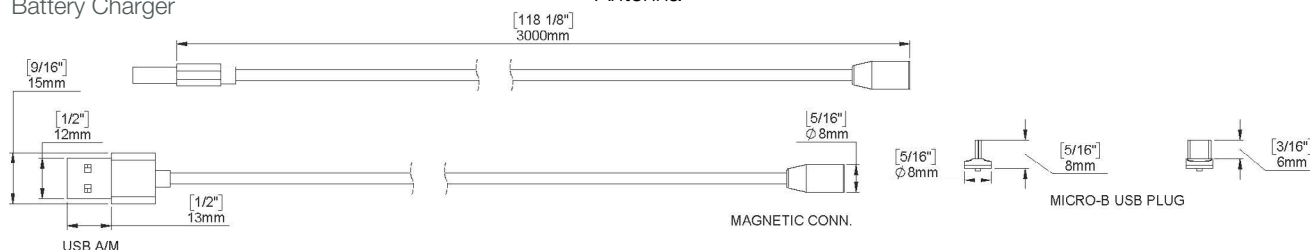
Cable
Antenna

Solar Panel Battery Charger
RTMSOLAR2

ECO friendly

12 9/16"
4 5/8"
1 3/8"

Battery Charger

[118 1/8"] 3000mm
[9/16"] 15mm
[1/2"] 12mm
[1/2"] 13mm
USB A/M
[5/16"] Ø 8mm
MAGNETIC CONN.
[5/16"] Ø 8mm
[5/16"] 8mm
MICRO-B USB PLUG
[3/16"] 6mm

MOTOR SELECTION GUIDE FOR ROLLER SHADES

- Find the chart with the proper range of the shade fabric weight.
- In the chart, find the shade width and drop. The color-coded boundaries indicate the systems that will work with the shade you are considering. There are usually more than one choice. Choose a system so your shade is well within its boundary.
- If there are multiple shades in one room or along the same wall, one should usually choose the same tube diameter and motor for all of them if possible, so shades will operate in sync.
- If the shade is narrow and to the left side the system boundary, consider using DC tubular motor systems.
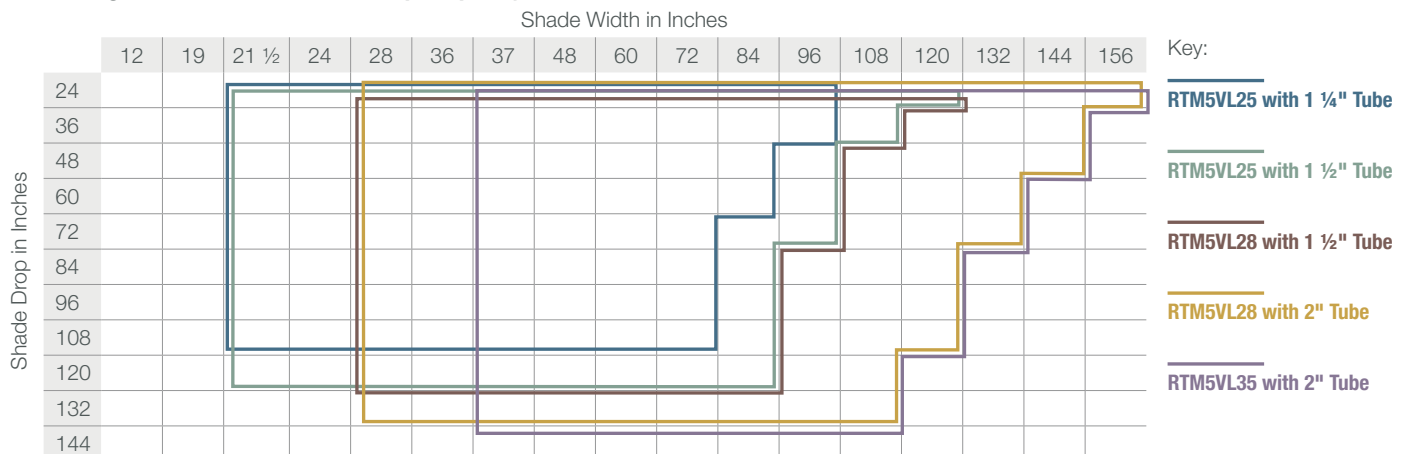- For the Motor Selection Guide for Roman Shades, see page 14.

Fabric weight that is less than 10 ounces per square yard
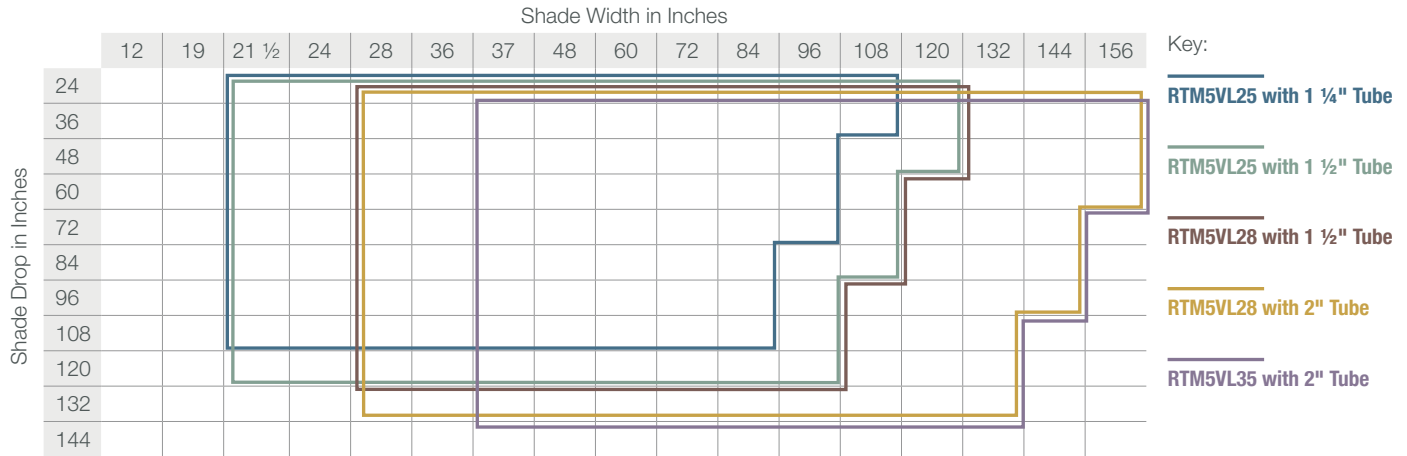
Fabric weight between 10 and 15 ounces per square yard
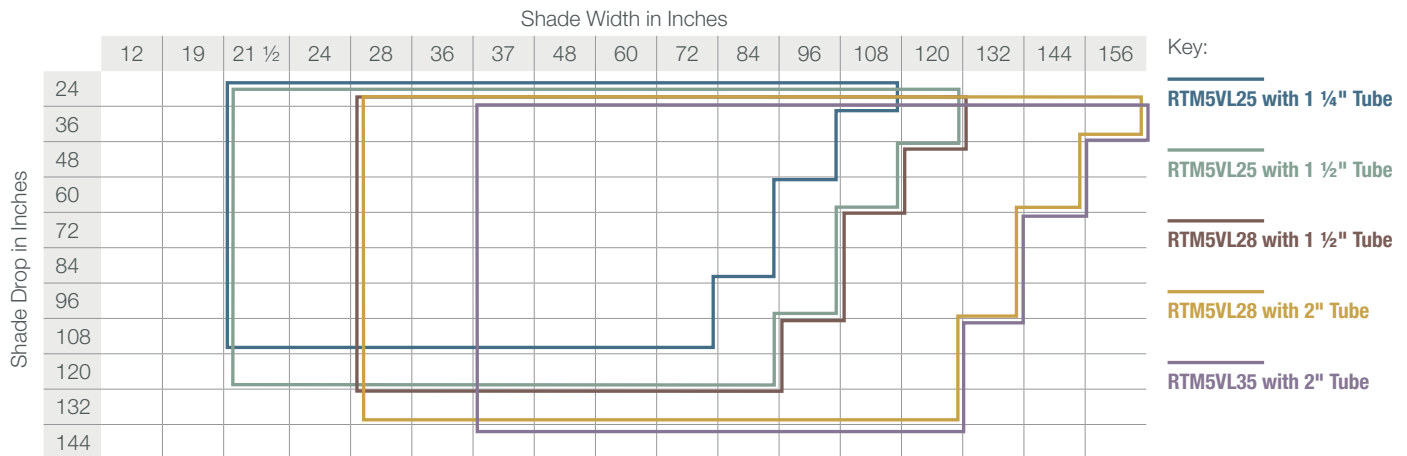
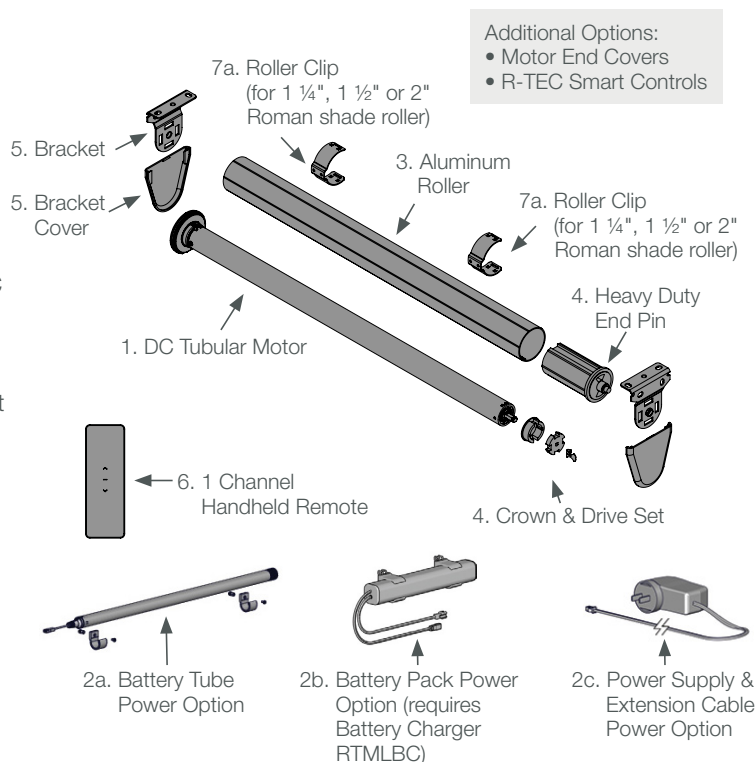**Fabric weight between 16 and 20 ounces per square yard**

DC TUBULAR MOTORS

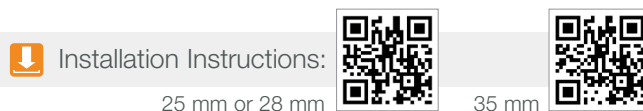## PARTS LIST

1. DC Tubular Motor
   a. 25 mm Motor Size: RTMDCZ25
   b. 28 mm Motor Size: RTMDCZ28
   c. 35 mm Motor Size: RTMDC35
2. Power Source:
   a. Battery Tube for 25 mm Motor RTMDCBT
   b. Rechargeable Battery Pack for 25/28 mm Motors RTMDCRBP (requires Battery Charger RTMLDSSBC or Solar Panel Battery Charger RTMSOLAR2)
   c. Power Supply RTMDC18/25 or RTMDC28/35
   d. 18 Channel Power Distributor (requires 16/2 to 24/2 gauge cable hookup. Refer to the product information sheet for cable size) bit.ly/18-ch-dist-cable
3. Aluminum Roller
   a. Length Options: 4', 6', 8', 12' or 16'
   b. Roller Size: 1 ¼", 1 ½" or 2"
4. Drive Set Kit - matches Motor & Aluminum Roller Size
5. Brackets & Bracket Covers (covers are optional for Roller Shade only)
6. R-TEC Smart Controls: Custom systems include 1 Channel Handheld Remote with Wall Mount. Additional control options shown on pages 18 - 19.
7. Additional Roman or Roller Components:
   a. If building Roman Shade:
      • Lift Band Shade - Lift Band Material, Fiberglass Ribs, Rib Center Support Rings & End Caps & Weight Bar
      • Lift Cord Shade - Soft Shade Roller Clips, Encased Lift Cord Shroud Tube or Tape & Weight Bar
   b. If building Roller Shade:
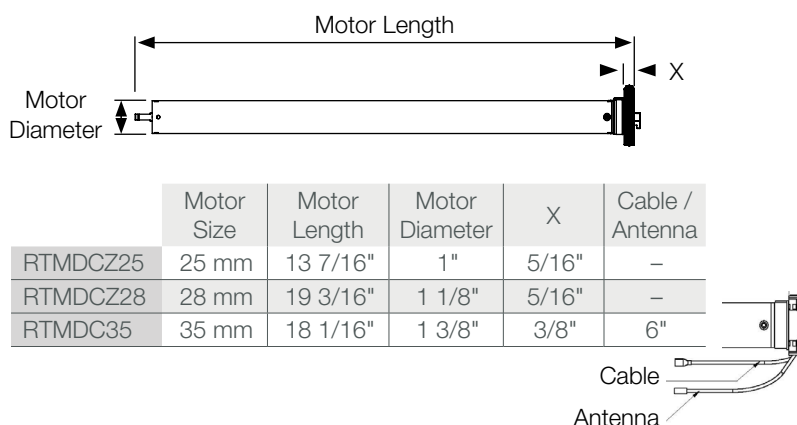   • Weight Bar

Additional Options:
• Motor End Covers
• R-TEC Smart Controls

7a. Roller Clip (for 1 ¼", 1 ½" or 2" Roman shade roller)
5. Bracket
5. Bracket Cover
3. Aluminum Roller
7a. Roller Clip (for 1 ¼", 1 ½" or 2" Roman shade roller)
4. Heavy Duty End Pin
1. DC Tubular Motor
6. 1 Channel Handheld Remote
4. Crown & Drive Set

2a. Battery Tube Power Option
2b. Battery Pack Power Option (requires Battery Charger RTMLBC)
2c. Power Supply & Extension Cable Power Option

Installation Instructions: 25 mm or 28 mm   35 mm

MOTOR DIMENSIONS

DC Tubular Motor

Motor Length

X

Motor Diameter

	Motor Size	Motor Length	Motor Diameter	X	Cable / Antenna
RTMDCZ25	25 mm	13 7/16"	1"	5/16"	–
RTMDCZ28	28 mm	19 3/16"	1 1/8"	5/16"	–
RTMDC35	35 mm	18 1/16"	1 3/8"	3/8"	6"

Cable

Antenna

SOLAR DIMENSIONS

Solar Panel Battery Charger RTMSOLAR2

ECO friendly

12 9/16"
4 5/8"
1 3/8"
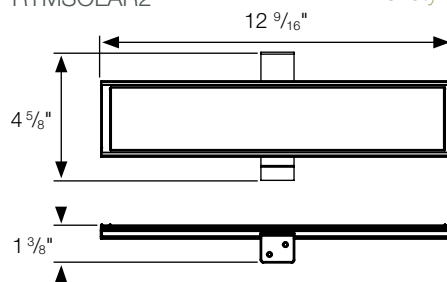
POWER OPTION DIMENSIONS

Battery Tube
RTMDCBT

8 3/4"   18 1/4"   3/4"

Battery Pack
RTMDCRBP

[1 5/8"]
40mm

[1 7/16"]
36mm

[1 5/16"]
33mm

[10 7/16"]
265mm

[13/16"]
20mm

[1 1/16"]
28mm

Motor Cable 155mm [6 1/8"]

[3/4"]
19mm
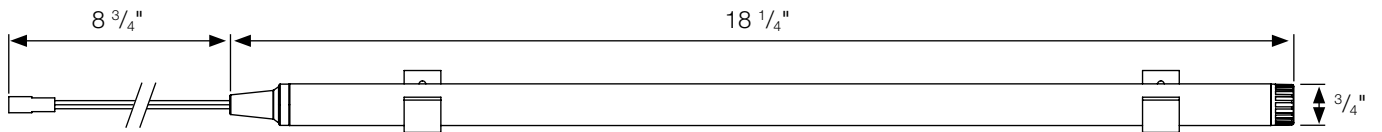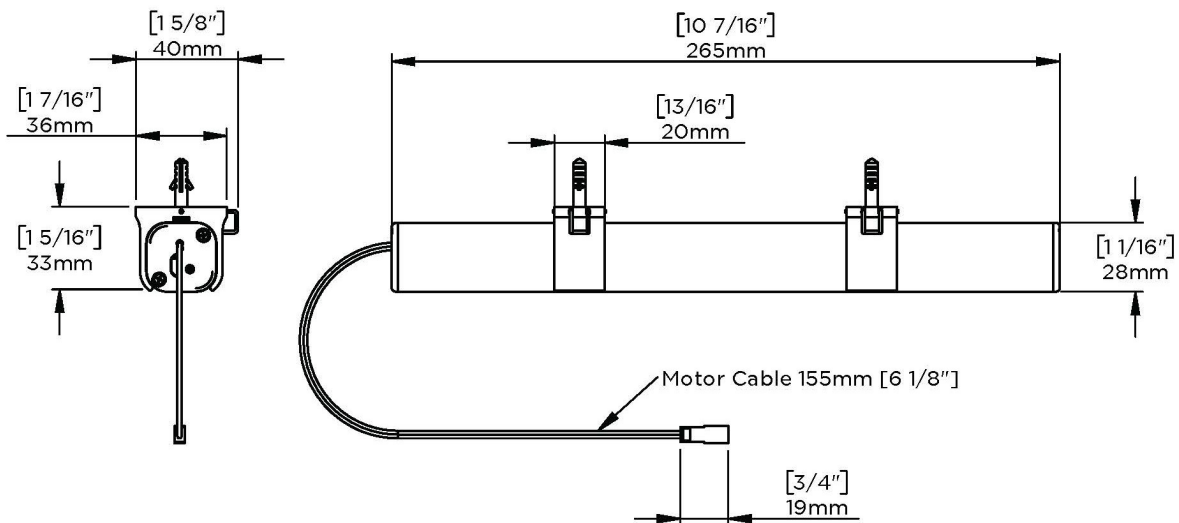
Power Supply for 25 mm DC Motor
RTMDC18/25

3"

2"

60"
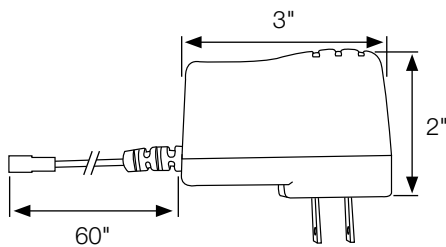
Power Supply for 28 mm or 35 mm DC Motors
RTMDC28/35

4 1/4"

2"

128"
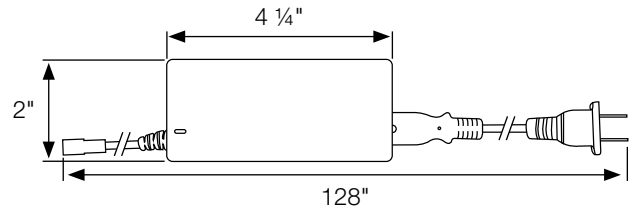
18 Channel Power Distributor
RTMDCPD18

NOTE:
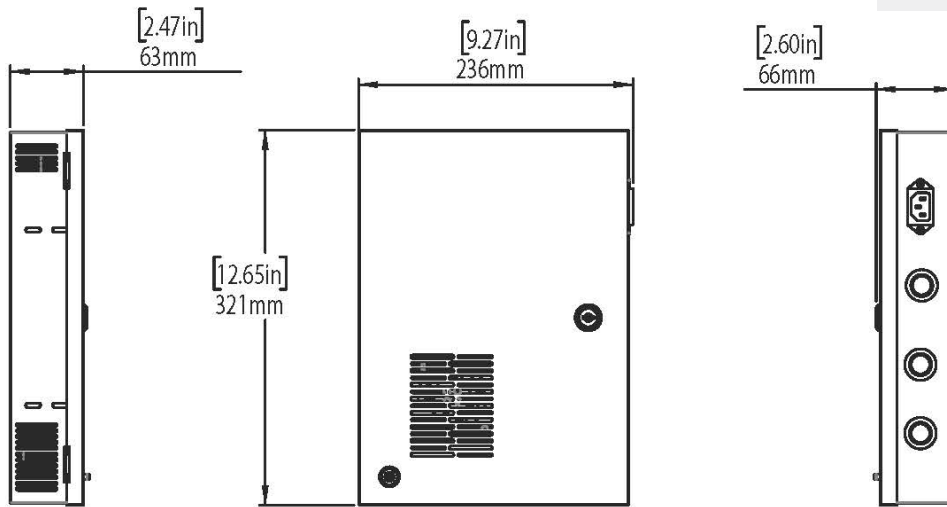Up to 18 motors (25 mm and 28 mm)
Up to 9 motors (35 mm)

Requires 16/2 to 24/2 gauge cable hookup. Refer to the product information sheet for cable size: bit.ly/18-ch-dist-cable

MOUNTING BATTERY TUBE OR PACK TO THE DUSTBOARD

Mounting the Battery Tube to the Dustboard
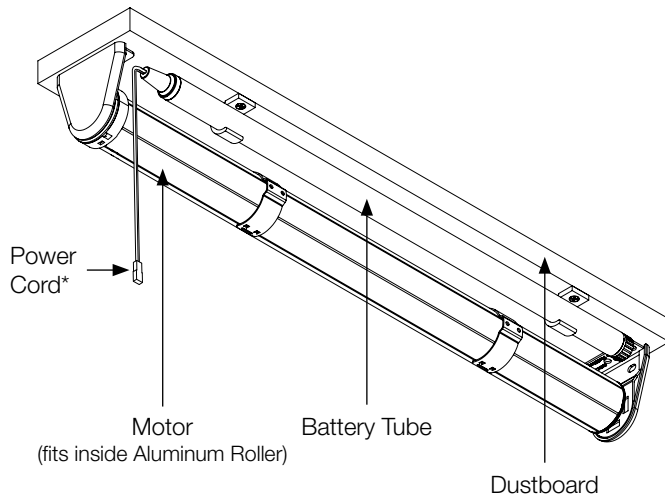
Mounting the Battery Pack to the Dustboard

Power Cord*

Motor
(fits inside Aluminum Roller)

Battery Tube

Dustboard

Power Cord*

Motor
(fits inside Aluminum Roller)

Battery Pack

Dustboard
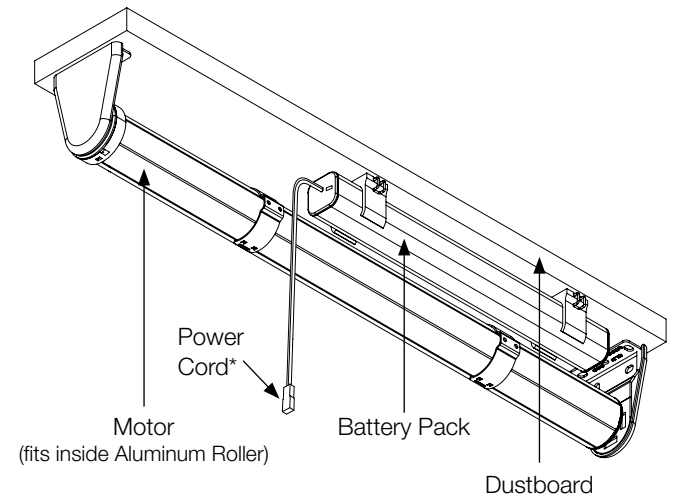
*Power Cord plugs into Motor from the Battery Tube or Battery Pack. Keep cords away from rotating parts of the shade during operation.

MOTOR SELECTION GUIDE FOR ROLLER SHADES

- Find the chart with the proper range of the shade fabric weight.
- In the chart, find the shade width and drop. The color-coded boundaries indicate the systems that will work with the shade you are considering. There are usually more than one choice. Choose a system so your shade is well within its boundary.
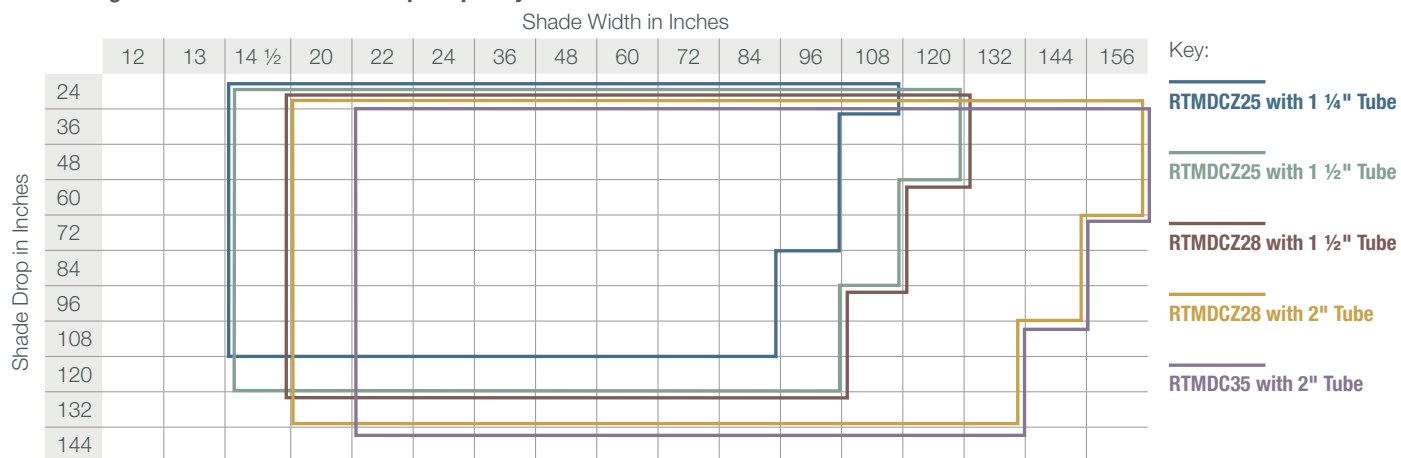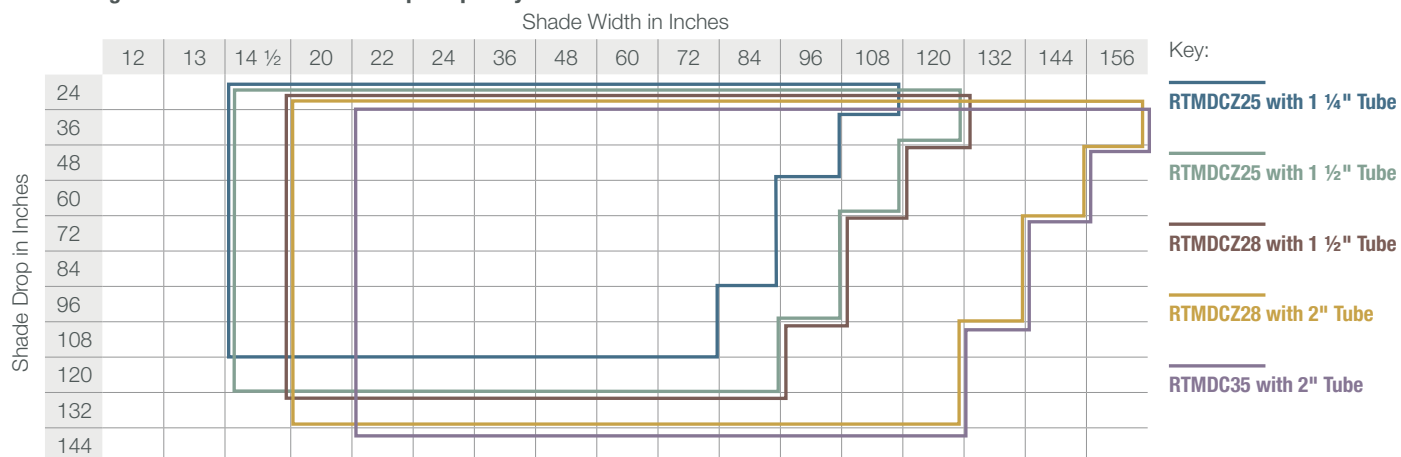- If there are multiple shades in one room or along the same wall, one should usually choose the same tube diameter and motor for all of them if possible, so shades will operate in sync.
- For the Motor Selection Guide for Roman Shades, see page 15.

Fabric weight that is less than 10 ounces per square yard

Key:
- RTMDCZ25 with 1 ¼" Tube
- RTMDCZ25 with 1 ½" Tube
- RTMDCZ28 with 1 ½" Tube
- RTMDCZ28 with 2" Tube
- RTMDC35 with 2" Tube

Fabric weight between 10 and 15 ounces per square yard

Key:
- RTMDCZ25 with 1 ¼" Tube
- RTMDCZ25 with 1 ½" Tube
- RTMDCZ28 with 1 ½" Tube
- RTMDCZ28 with 2" Tube
- RTMDC35 with 2" Tube

Fabric weight between 16 and 20 ounces per square yard

Key:
- RTMDCZ25 with 1 ¼" Tube
- RTMDCZ25 with 1 ½" Tube
- RTMDCZ28 with 1 ½" Tube
- RTMDCZ28 with 2" Tube
- RTMDC35 with 2" Tube
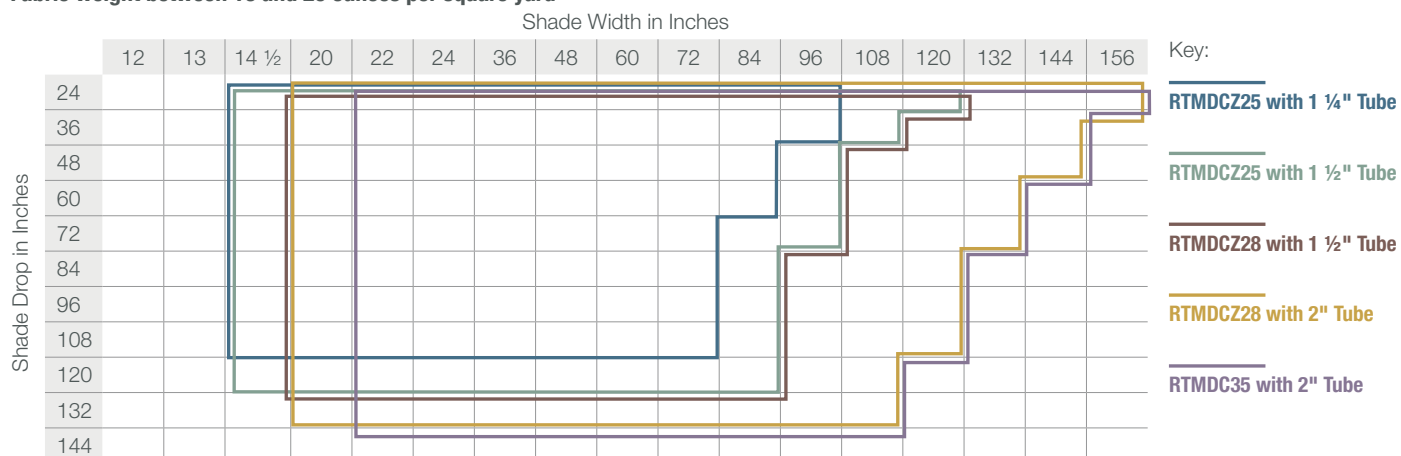
SKYLINE EASY LINK SYSTEM

- Allows for multiple shades to be controlled by a single motor.
- Can be used in applications requiring narrow brackets.
- Allows for minimal gaps between each shade.
- Reduces the number of controllers required.
- Total allowable shade weight still determined by the single motor.
- Retractable drive components for easy assembly into the brackets.
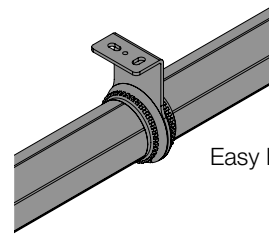
Easy Link System Installed

PARTS LIST

1. Skyline Easy Link System: includes Bracket, Bearing, Female Drive & Male Drive.
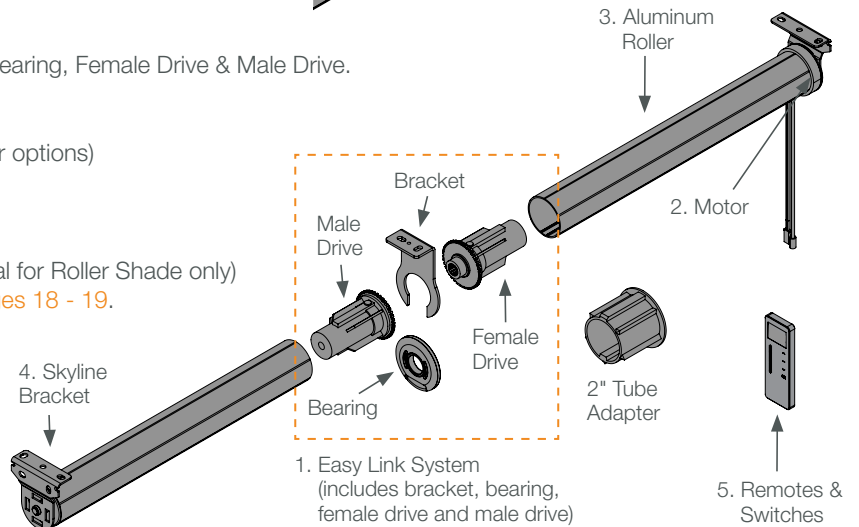   a. 1 $^5/_8$" projection: RTMELKIT1
    b. 2 $^1/_8$" projection: RTMELKIT2
2. Motor & Power Source (see previous pages for options)
3. Aluminum Roller
    a. Length Options: 4', 6', 8', 12' or 16'
    b. Roller Size: 1 ½"
4. Brackets & Bracket Covers (covers are optional for Roller Shade only)
5. R-TEC Smart Controls: Options shown on pages 18 - 19.
6. Additional Roman or Roller Components:
    a. If building Roman Shade:
        - Lift Band Shade - Lift Band Material, Fiberglass Ribs, Rib Center Support Rings & End Caps & Weight Bar
        - Lift Cord Shade - Soft Shade Roller Clips, Encased Lift Cord Shroud Tube or Tape & Weight Bar
    b. If building Roller Shade:
        - Weight Bar

3. Aluminum Roller

2. Motor

Bracket

Male Drive

Female Drive

4. Skyline Bracket

Bearing

2" Tube Adapter

1. Easy Link System (includes bracket, bearing, female drive and male drive)

5. Remotes & Switches

MOTOR SELECTION GUIDES FOR ROMAN SHADES
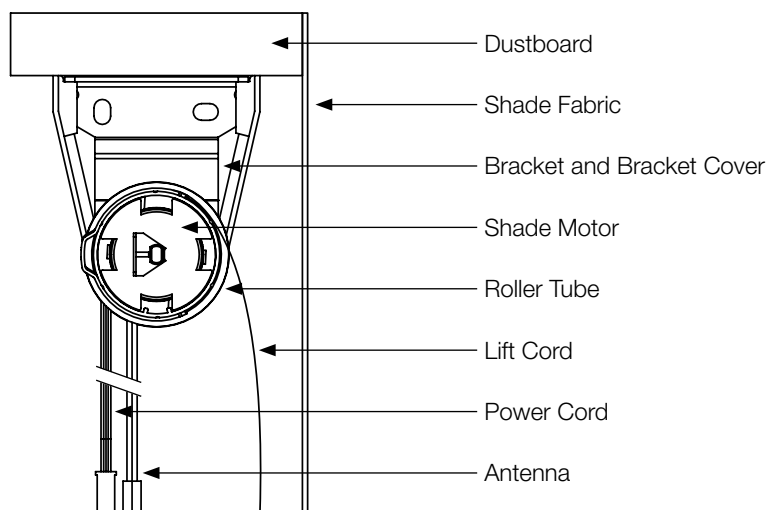
WIREFREE TUBULAR MOTORS

- Roman shades use 1 ¼", 1 ½" or 2" tube.
- See the Key for the maximum shade drop.
- Weigh or estimate the total shade weight (including shade ribs, bottom weight bar etc). The shade total weight does not include the dust board.
- In the chart, find the shade width and total shade weight. The color-coded boundaries indicate the motors that work with the shade you are considering. If both motors work, choose the one that your shade is well within its boundary.
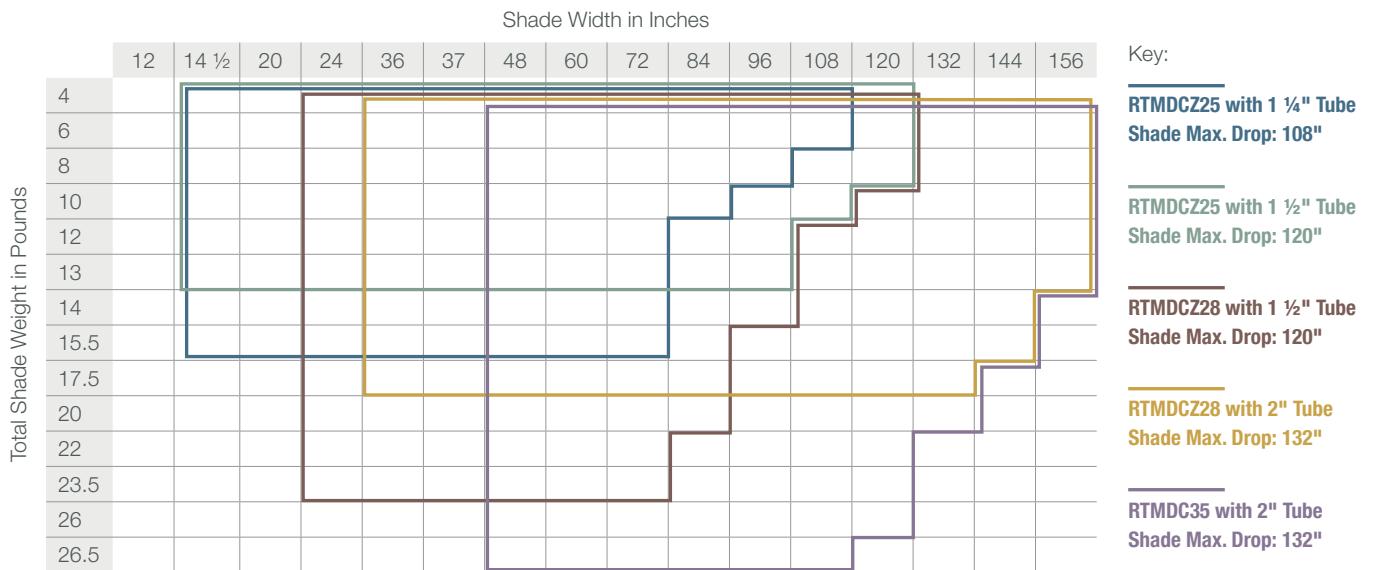- If the shade is narrow and to the left side of both system boundaries, consider using DC tubular motor systems.

Shade Width in Inches

Total Shade Weight in Pounds	12	19	21 ½	24	28	36	37	48	60	72	84	96	108	120	132	144	156
4																	
6																	
8																	
10																	
12																	
13																	
14																	
15.5																	
17.5																	
20																	
22																	
23.5																	
26																	
26.5																	

Key:

RTM5VL25 with 1 ¼" Tube
Shade Max. Drop: 108"

RTM5VL25 with 1 ½" Tube
Shade Max. Drop: 120"

RTM5VL28 with 1 ½" Tube
Shade Max. Drop: 120"

RTM5VL28 with 2" Tube
Shade Max. Drop: 132"

RTM5VL35 with 2" Tube
Shade Max. Drop: 132"
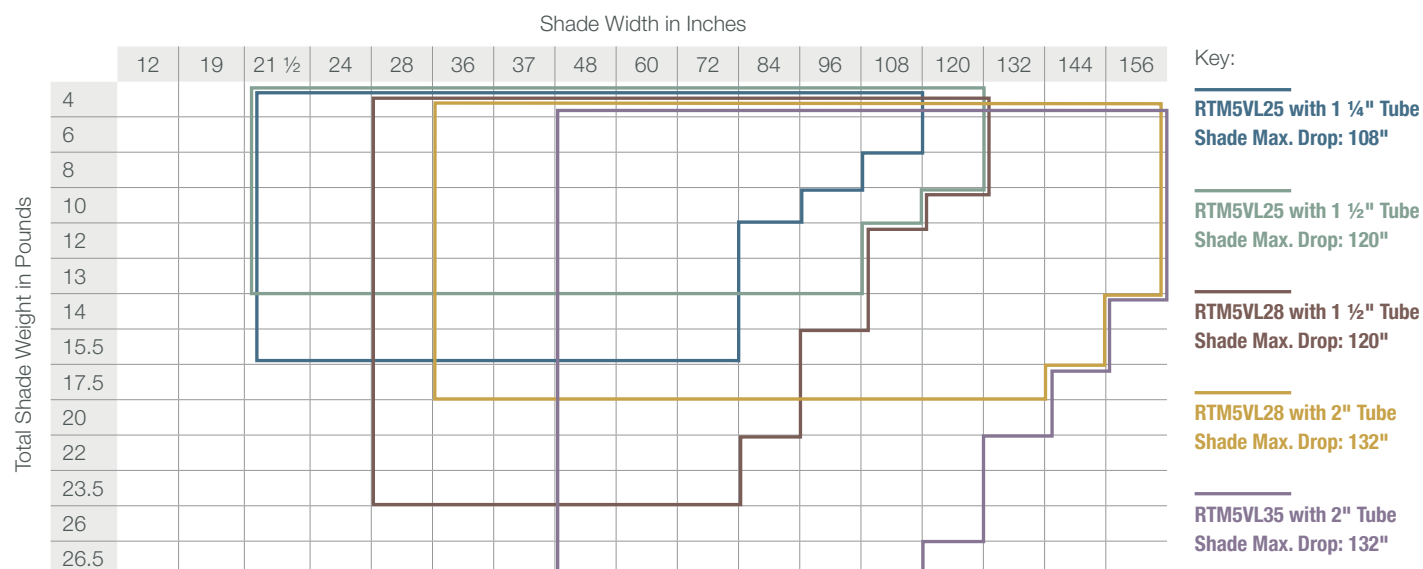
ROMAN SHADE CROSS SECTION

- Dustboard
- Shade Fabric
- Bracket and Bracket Cover
- Shade Motor
- Roller Tube
- Lift Cord
- Power Cord
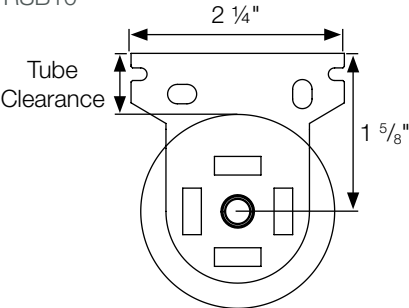- Antenna

DC TUBULAR MOTORS

- Roman shades use 1 ¼", 1 ½" or 2" tube.
- See the Key for the maximum shade drop.
- Weigh or estimate the total shade weight (including shade ribs, bottom weight bar etc). The shade total weight does not include the dust board.
- In the chart, find the shade width and total shade weight. The color-coded boundaries indicate the motors that work with the shade you are considering. If both motors work, choose the one that your shade is well within its boundary.

Shade Width in Inches

Total Shade Weight in Pounds	12	14 ½	20	24	36	37	48	60	72	84	96	108	120	132	144	156
4																
6																
8																
10																
12																
13																
14																
15.5																
17.5																
20																
22																
23.5																
26																
26.5																

Key:

RTMDCZ25 with 1 ¼" Tube
Shade Max. Drop: 108"

RTMDCZ25 with 1 ½" Tube
Shade Max. Drop: 120"

RTMDCZ28 with 1 ½" Tube
Shade Max. Drop: 120"

RTMDCZ28 with 2" Tube
Shade Max. Drop: 132"

RTMDC35 with 2" Tube
Shade Max. Drop: 132"

SKYLINE BRACKETS

SKYLINE BRACKET & COVER DIMENSIONS

Skyline Bracket
RSB10

2 ¼"

Tube Clearance

1 $\frac{5}{8}$"

Skyline Bracket
RSB20

2 ¼"

Tube Clearance

2 $\frac{1}{8}$"
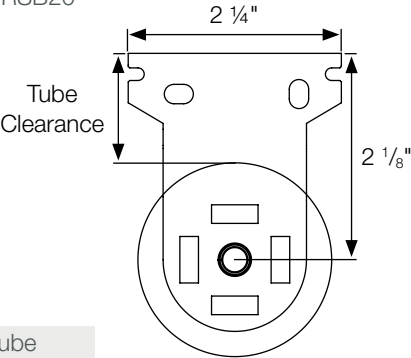
	1 $\frac{1}{4}$" Tube Clearance	1 $\frac{1}{2}$" Tube Clearance	2" Tube Clearance
RSB10	1"	$\frac{7}{8}$"	$\frac{5}{8}$"
RSB20	1 $\frac{1}{2}$"	1 $\frac{3}{8}$"	1 $\frac{1}{8}$"

Skyline Bracket Cover for RSB10
RSBC10/

2 $\frac{1}{2}$"

2 $\frac{1}{2}$"
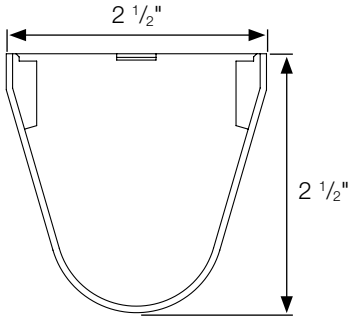
Skyline Bracket Cover for RSB20
RSBC20/

2 $\frac{1}{2}$"

3"

Narrow Skyline Bracket
RSNB10

1 ½"

Tube Clearance

1 $\frac{5}{8}$"
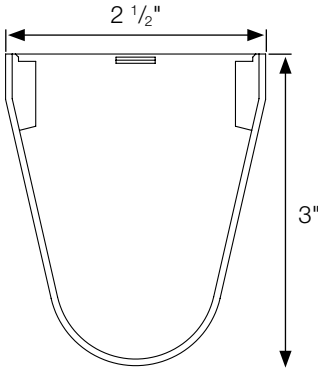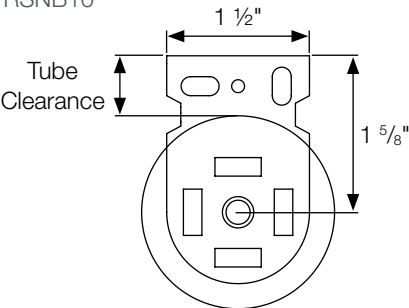
Narrow Skyline Bracket
RSNB20

1 ½"

Tube Clearance

2 $\frac{1}{8}$"
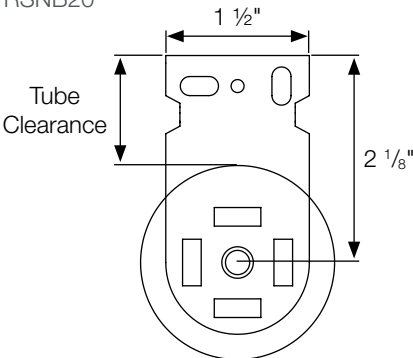
Narrow Skyline Bracket
RSNB30

1 ½"

Tube Clearance

2 $\frac{7}{8}$"
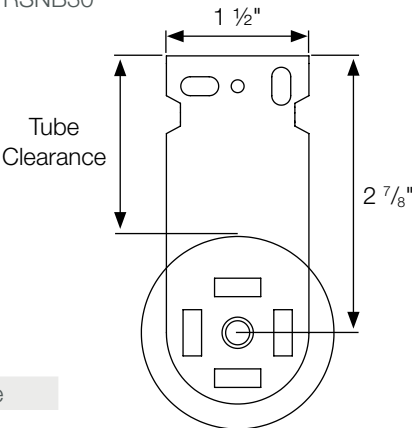
	1 $\frac{1}{4}$" Tube Clearance	1 $\frac{1}{2}$" Tube Clearance	2" Tube Clearance
RSNB10	1"	$\frac{7}{8}$"	$\frac{5}{8}$"
RSNB20	1 $\frac{1}{2}$"	1 $\frac{3}{8}$"	1 $\frac{1}{8}$"
RSNB30	2 $\frac{1}{4}$"	2 $\frac{1}{8}$"	1 $\frac{7}{8}$"

Note: Narrow brackets do not work with Bracket Covers.

SKYLINE BRACKET SELECTION GUIDE FOR ROLLER SHADES

- Find the chart with the tube size you are going to use.
- In the chart, find the shade fabric thickness and drop. If the fabric thickness is a between the values, go to the next larger value. For example, if the fabric thickness is 0.024", find 0.03 fabric thickness in the chart. The color-coded areas indicate which bracket works with the shade you are considering.

Fabric Thickness in Inches

1 1/4" Tube | **1 1/2" Tube** | **2" Tube**

Shade Drop in Inches

Key

Color	Bracket
RSB10 or RSNB10	RSB10, RSNB10, RSB20 or RSNB20
RSB20 or RSNB20	RSNB20 or RSNB30
RSNB30	
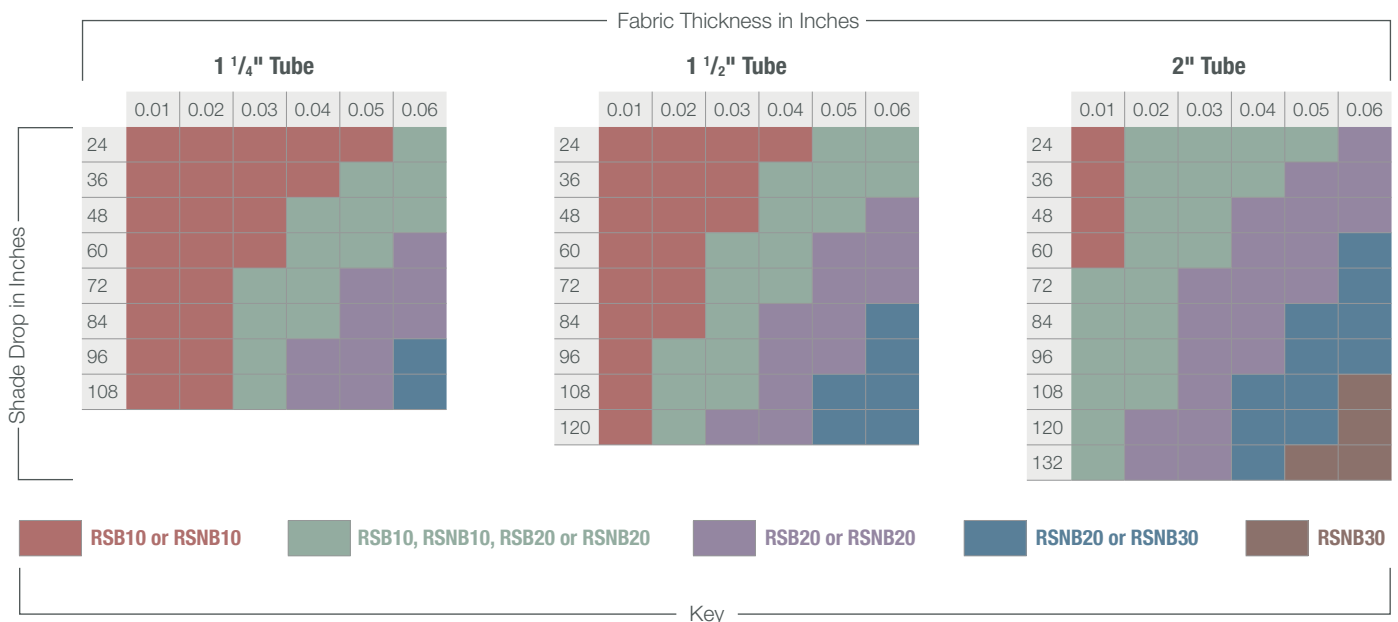
*Note: Use only RSB10 or RSNB10 for Roman Shades.

R-TEC SHADE CUSTOM OPTIONS

CUSTOM SOLUTIONS

custom solutions

- Save yourself valuable time, our in-house experts will fully assemble your R-TEC Automation® Shade System.
- The system ships to you completely ready for your fabric to be attached.
- The custom solution for Tubular Motor Shades includes motor, power supply, aluminum roller, brackets & bracket covers, drive set kit, wood shade slat and a 1 channel handheld remote with wall mount.
- See pages 18 - 19 for alternative remote options.
- Ships in 5 business days.
- Shades up to 102" in width are typically shipped FedEx Ground®.
- For more information, contact Rowley sales and ask about Custom Solutions, or visit bit.ly/R-TEC-Auto-Shades-CS.
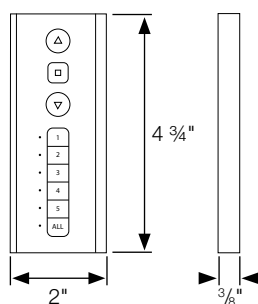
R-TEC SMART CONTROLS
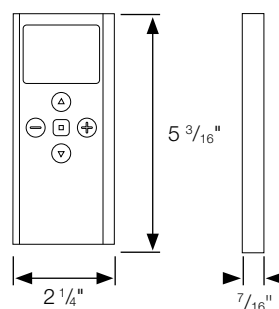
HANDHELD REMOTES WITH WALL MOUNTS
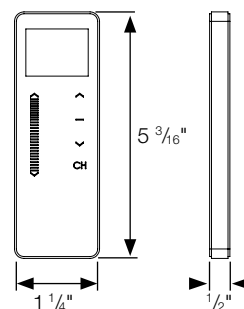
1 Channel Remote
Range: 65'
RTMHR1C

5 ³/₁₆"

1 ¼"   ½"
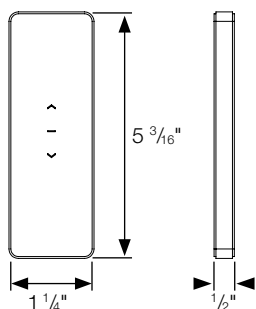
Push5 Channel Remote
Range: 65'
RTMHR5C

4 ¾"

2"   ³/₈"

Push15 Channel Remote
Range: 65'
RTMHRP15C or /K

5 ³/₁₆"

2 ¼"   ⁷/₁₆"

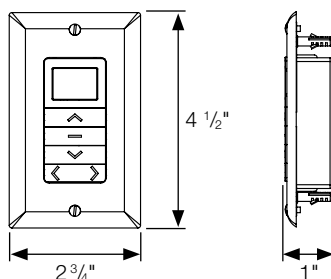15 Channel Remote
Range: 65'
RTMHR15C

5 ³/₁₆"

1 ¼"   ½"

WALL SWITCHES

5 Channel Surface Mount Wall Switch
Range: 65'
RTMWSR5C

4 ½"

2 ³/₄"   ⁷/₁₆"
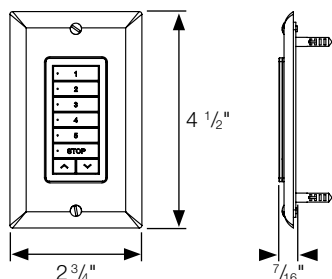
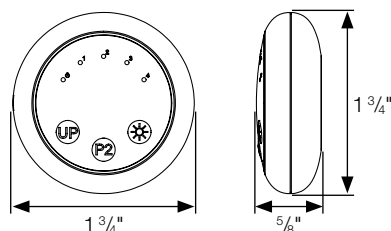1, 2 or 15 Channel Wall Box Mount Switch
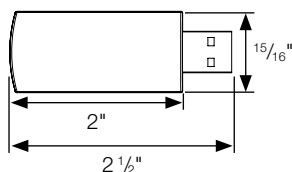Range: 65', requires RTMSMB/W for installation
RTMWCR1C, RTMWCR2C, RTMWSR15C

4 ½"

2 ³/₄"   1"

RTMSMB/W

SUN SENSOR

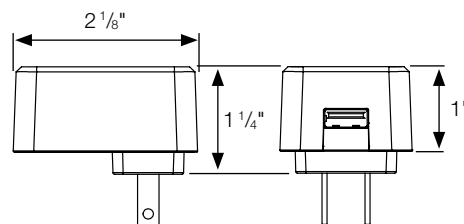Interior Sun Sensor
Range: 65'
RTMISS

1 ³/₄"

1 ³/₄"   ⁵/₈"

SIGNAL REPEATER

ARC USB Signal Repeater
Extends the wireless range of the
R-TEC Hub and Remotes up to 60'
Maximum 2 per system or network
RTMUSR

15/₁₆"

2"

2 ½"

Wall Charger for USB Signal Repeater
RTMLWCW

2 ¹/₈"

1 ¼"   1"

R-TEC AUTOMATION® HUB & APP CAPABILITIES

The R-TEC Automation® Hub and App integration allow window treatments to be controlled directly from a smartphone or integrated device while at home or away. Now available in the Apple® App Store or Google Play™, search for Rowley to find and download the new R-TEC Automation® App. As an alternative, remotes and wall switches allow for individual, group and all control for a customized solution with 1, 5 or 15 channel options.

R-TEC Hub with 2-Way RF | Range: 60'
The R-TEC Hub provides the heartbeat of the R-TEC Automation® experience. With Wi-Fi built in, simply plug in where convenient and connect to the local network.
RTMHUB2

4 ½"

4 ½"

RJ45 Socket

Factory Reset

Pairing Button

1 ¼"

5 V DC / 1A Micro USB
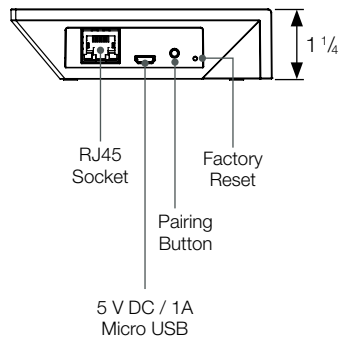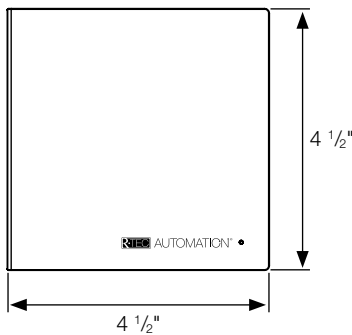
Our R-TEC Automation® App enables simple, intuitive control and system configuration from your smartphone or tablet. Compatible with R-TEC Hub.

GET IT ON Google Play

Download on the App Store

COMPATIBLE SYSTEMS - NOT SOLD BY ROWLEY

Apple HomeKit
Simply set up the R-TEC Hub and App then instruct Siri to control your window treatments, with your voice, via a variety of Apple devices.

Amazon Alexa
Conveniently ask Alexa to open and close your window treatments with the power of your voice.

Google Home
Gives you control via a simple voice command. Use your Google phone for on-the-go control.

IFTTT - If This Then That
A free online tool that connects services to create new experiences, such as weather apps, offering the ability to detect sunrise for opening window treatments.

IFTTT

R-TEC Automation® is a convenient, comfortable, lifestyle solution that integrates smart technology solutions allowing you to conveniently control window treatments throughout the home.

The R-TEC Automation® Hub and App integration allow window treatments to be controlled directly from a smartphone or integrated device while at home or away. As an alternative, remotes and wall switches allow for individual, group and all control for a customized solution with 1, 2, 5 or 15 channel options.

CUSTOMER SERVICE HOURS
Monday - Friday 8am - 6pm ET

PHONE: 866.985.3423 | FAX: 800.554.0407

EMAIL: RTECAutomation@RowleyCompany.com

ORDER ONLINE: RowleyCompany.com

R-TEC Automation® Shade Systems ship within 5 business days.