

Exterior Motorized FlexShade® XL

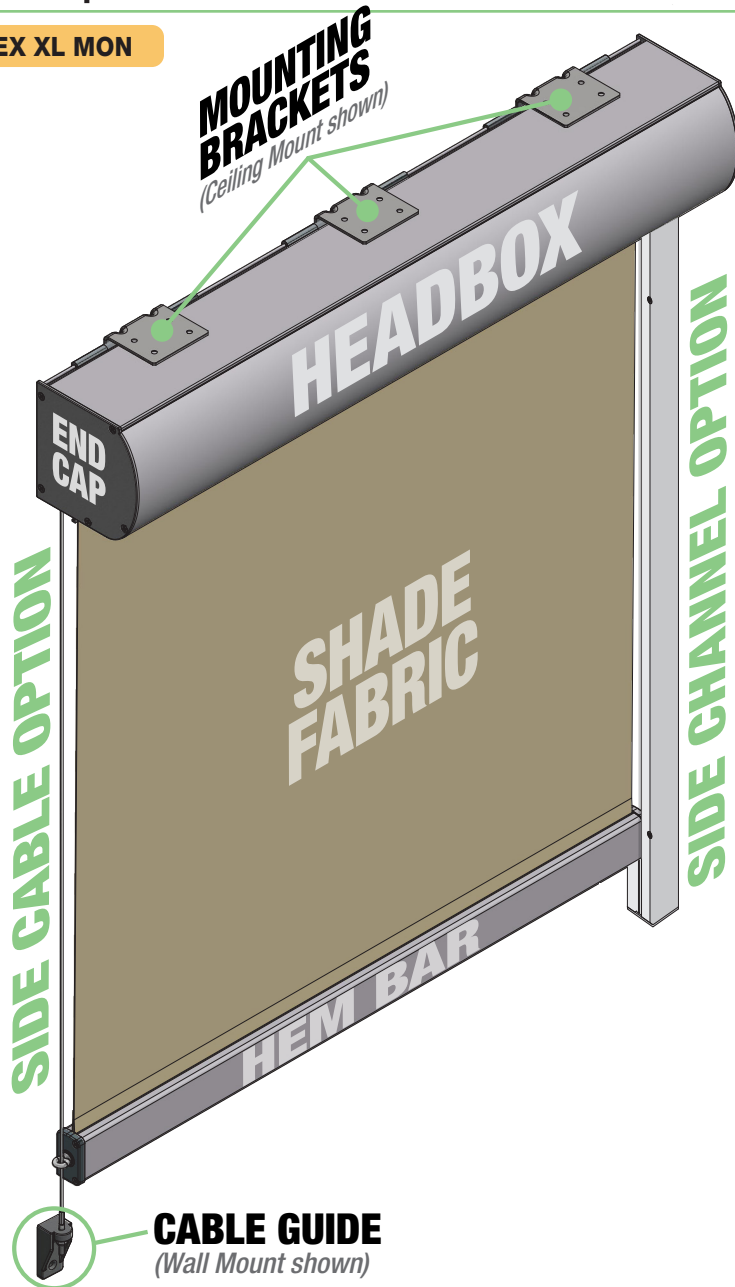
Outdoor shading system with smooth, quiet operation and independent control



INSTRUCTIONS INSTALLATION & OPERATION

Overview - Components

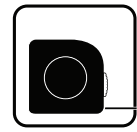
EXT FLEX XL MON



TOOLS REQUIRED



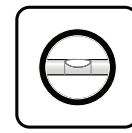
PENCIL



TAPE MEASURE



LASER LEVEL



LEVEL



POWER DRILL



WIRE STRIPPERS



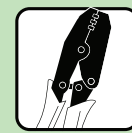
HARDWARE (by others)



PLIERS



HEX WRENCH



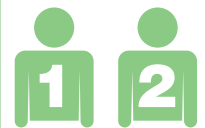
CRIMPING TOOL

NOTE: Draper® recommends the **32-VC:VG Crimping Tool** available from www.nicopress.com

CAUTION

Read and understand all warnings before beginning installation.

PERSONNEL REQUIRED



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If you have any difficulties installing or servicing your Exterior Motorized FlexShade® XL, call your dealer or Draper, Inc.

PLEASE READ - Important Installation Information

⚠ Caution:

1. Inspect all boxes to make sure you have received the proper shades and parts. Controls may be shipped separately, or in same carton as shades.
2. Open cartons lengthwise, taking care not to cut into cardboard shipping container.
3. Before mounting shades, verify measurements on label provided with shade, and ensure unit is installed at correct width.
4. All endcaps, fascia, pocket headbox, and other hardware must be installed level. Shades must be level and square.
5. **Read the following installation guidelines thoroughly and follow them carefully. Failure to do so may cause product to fall or otherwise fail, and invalidates warranty.**
6. **Installer is responsible for selecting mounting hardware appropriate for site conditions.**

PLEASE READ - Safety Information

Important Safety Information



Important Safety Information

Improper installation and use of the Exterior Motorized FlexShade® XL can result in serious injury or death. Primarily, injuries can occur if the unit falls due to imprecise installation, mishandling of the unit during installation, or installation on an insufficient wall or ceiling structure. Please use extreme care.

1. Please read the following installation guidelines thoroughly and follow them carefully. Failure to do so may cause product to fall or otherwise fail, and could result in serious injury.
2. Installation and calibration of the unit should only be performed by an authorized, qualified, and experienced professional. In particular, electrical work and wiring [indicated in diagram by dashed lines] must be completed only by a qualified professional electrician who has read this manual completely and is familiar with the construction and operation of this equipment and the hazards involved.
3. Do not affix the unit to wall or ceilings that have inadequate strength to permanently hold the unit during use. It is the owner's and installer's responsibility to confirm the wall or ceiling to which the unit attaches is sufficient to permanently hold the weight and stress loads of the unit at all times. Draper®, Inc., is not responsible for improper installation, application, testing, or workmanship related to the product at place of installation.
4. It is the installer's responsibility to make sure appropriate fasteners are used for mounting.
5. All brackets, fascia, headboxes, pockets, wall clips, and other hardware must be installed level. Unit must be level and square.
6. Never leave the area while operating the unit during installation, maintenance, or normal operation, unless it is secure and safe.
7. Before testing or operation, carefully inspect the entire area and path of the shade and areas underneath the shade to be sure no persons or objects are in the area.
8. Turn off power and any nearby equipment or cables carrying electricity before connecting switches, wires, controls, or electrical components.
9. Make sure the limit switches are pointed down or accessible when placing the motor in brackets/endcaps.
10. All motors should be tested and limits set using test cord before shades are wired.
11. Do not wire motors in parallel without written permission from Draper, Inc.
12. During testing or operation, carefully watch the surrounding area for any potential safety concerns including nearby persons or objects.
13. Do not use an extension cord. If the power supply cord is too short, have a qualified electrician install an outlet near the drapery operator.
14. After installation, the entire system, including all sensors, should be carefully tested to ensure safe and normal operation. Extreme care should be taken during testing to remain clear of moving parts to avoid possible injury.
15. Operation of unit should be performed only by authorized and qualified personnel, who have been trained in the safe and effective operation of the unit and understand its safety features.
16. The safety features of the unit, including sensors, should never be disabled, bypassed, or overridden. The system should not be operated until all safety features, including the sensors, are properly and completely installed, calibrated, and tested.
17. Unit may need to comply with local, state, or district rules and regulations, in particular when installed in schools. All applicable rules and regulations should be reviewed before installation and use.
18. Failure to precisely follow installation guidelines invalidates all warranties.
19. Custom products/installations may not be reflected in this manual. Call Draper, Inc., if you have questions about the installation of custom products or any questions about your installation.

Before Beginning Installation

1. Look for any job site conditions that could interfere with installation or operation of the system.
2. Read carefully and be sure to understand all installation instructions and all related operations manuals. These instructions are intended to serve as a guide for the installer and owner. They should be followed closely and combined with the expertise of experienced qualified installers. Draper, Inc., is not responsible for improper installation, application, testing, or workmanship related to the product at place of installation. Please retain all instructions for future use.
3. Open cartons lengthwise.
4. Locate and lay out all pieces.
5. Inspect all boxes to make sure you have received the proper shade and parts. Controls may be shipped separately, or in same carton as shade.
6. If you have any difficulties with installing, servicing, or operating your shade, call your dealer or Draper, Inc., 765-987-7999.

PLEASE READ - Field Adjustments

Each Draper Solar Control Shade is tested to ensure proper operation. Even with this testing, some field adjustments may be needed for telescoping.

If the shade is telescoping, place a piece of shimming fabric into the fabric roll when the shade is deployed on the side that the fabric will be drawn toward. For example: if the fabric is tracking to the left, place the shimming fabric on the right side.

PLEASE READ - Cleaning and Maintenance

Window covering products manufactured by Draper, when properly installed, should require no operational maintenance or lubrication.

Most standard Draper fabrics may be cleaned at the window by vacuuming with a soft brush attachment. They also may be cleaned by using a sponge or soft cloth and mild solution of warm soapy water. A mild dishwashing liquid is recommended. A clean dry cloth is recommended for the metal finish.

Please Note: Exceptions are GreenScreen Evolve®, GreenScreen Revive®, and Phifer® SW7000 fabrics, which must be cleaned with a dry art sponge.
(GreenScreen Revive® and GreenScreen Evolve® are registered trademarks of Mermet® USA. SheerWeave® is a registered trademark of Phifer® Incorporated.)

Section 1 - Preparation for Installation

⚠ Caution: Before mounting shades, verify measurements on carton label provided with shade, and ensure unit is installed at correct width.

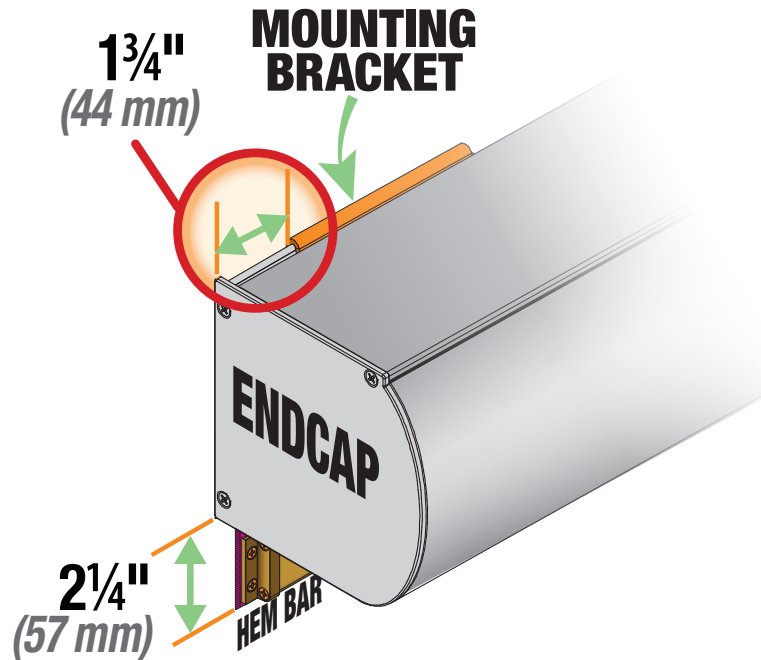
Please Note: Installer is responsible for selecting mounting hardware appropriate for site conditions.

1. Ensure mounting surface is strong enough to hold the unit.
2. Verify unit measurements and make sure it will fit in the desired location.

Please Note: Hem Bar does **not** retract into the Headbox and must be accounted for if mounting over a swinging window or door.

3. Mounting Brackets **MUST** be installed with a gap of 1 3/4" (44mm) between the Endcap and the Mounting Bracket edge. Mark wall or ceiling. Brackets must be spaced no more than 5' (152cm) apart.
4. Drill small starter holes (if necessary) in mounting surface.

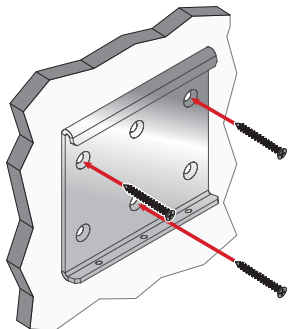
IMPORTANT: Brackets must be installed less than 60" apart. Installer **MUST** use all mounting brackets included with shade.



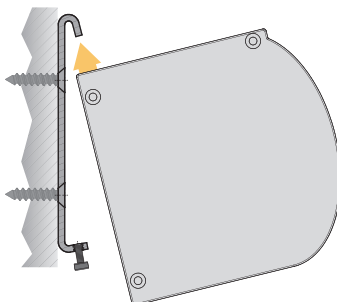
Section 2 - Mounting Headbox

Wall Installation **Please Note:** Be sure to use AT LEAST two (2) of the top mounting holes.

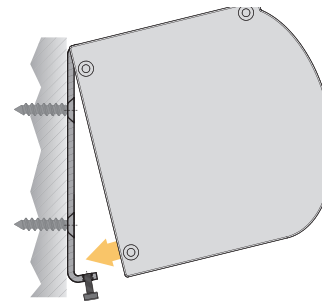
1. Attach Mounting Bracket to wall, with #10 flat head screws installed flush with bracket.



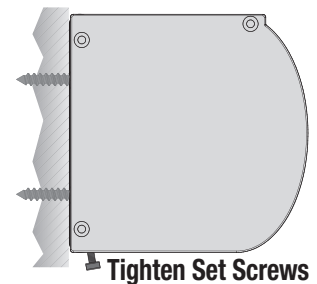
2. Attach Headbox to brackets, inserting top edge first.



3. Rotate Headbox down to engage with bottom of bracket.



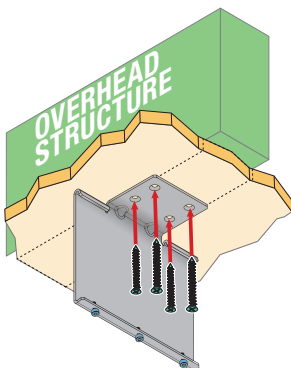
4. Tighten Set Screws to snug (using 3mm hex tool)



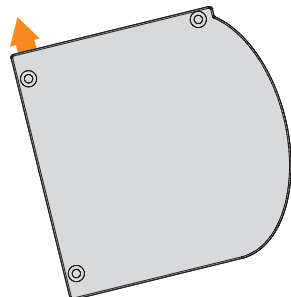
5. Install Side Channels (Section 3) or Cable Guides (Section 4).

Ceiling Installation **Please Note:** Be sure to use ALL FOUR (4) of the mounting holes.

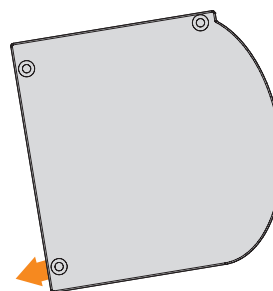
1. Attach Mounting Brackets to ceiling, with #10 flat head screws installed flush with bracket.



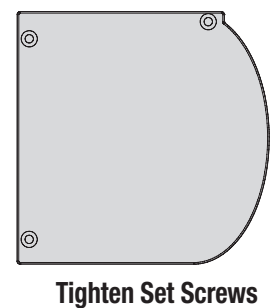
2. Attach Headbox to brackets, inserting top edge first.



3. Rotate Headbox down to engage with bottom of bracket.



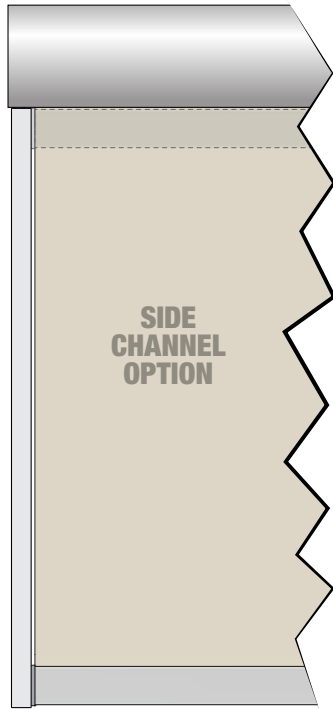
4. Tighten Set Screws to snug (using 3mm hex tool)



5. Install Side Channels (Section 3) or Cable Guides (Section 4).

PLEASE READ - **Important Installation Information**

WARNING: Fastener strength and fastener spacing are crucial for unit to operate correctly and withstand wind load. Secure Side Channel to structure with appropriate fasteners spaced **NO MORE THAN 24" (61cm)** apart.



IMPORTANT:

The Exterior FlexShade® requires either Side Channels or Side Cables in order to stabilize it in standard outdoor conditions.

Installation instructions

for Side Channel Option:

Section 3, Page 4 (below)

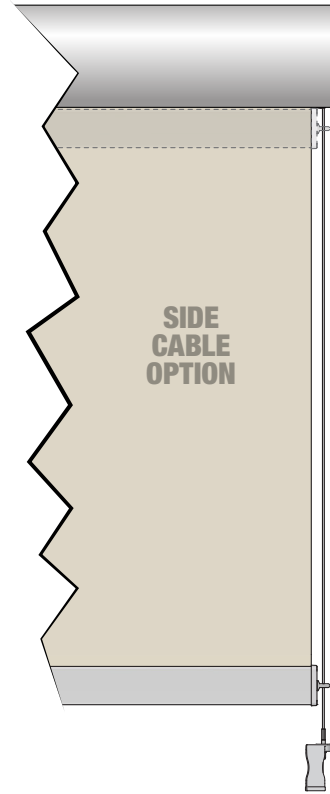
Installation instructions

for Side Cable Option:

Section 4, Page 6

Please Note:

Do not combine Cable and Channel mounts on an individual shade.



Section 3 - **Installing Side Channels Option** (Curved Headbox shown)

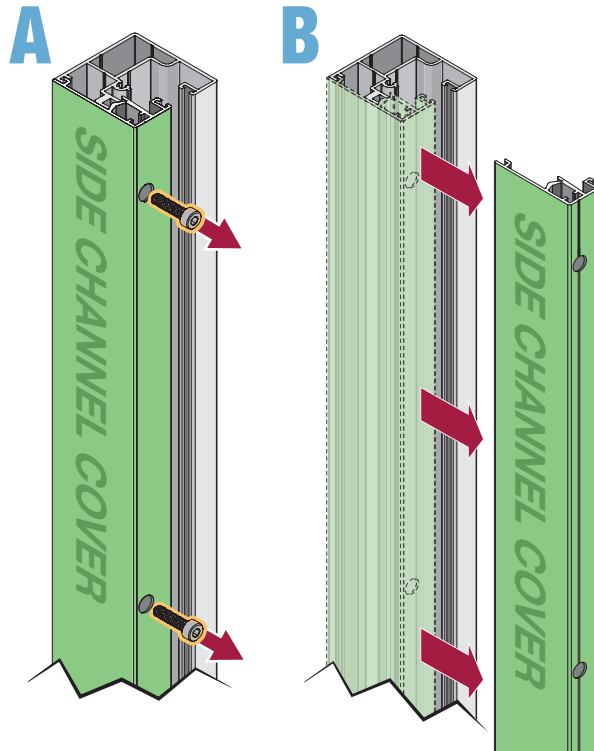
IMPORTANT: Side Channels must be installed parallel, plumb, and square, with a tolerance of $\pm 1/8"$ (3mm).

1. Use 3 mm Hex Wrench to remove Screws from Side Channels and Side Channel Covers.

Please Note: Do NOT remove the Bottom Caps from Side Channels.

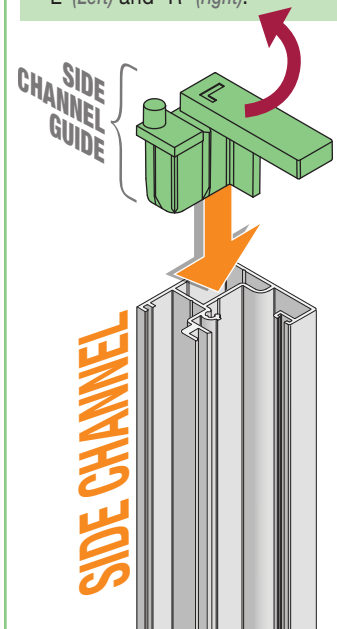
Please Note: Installer should make note of left & right covers so they match up correctly when re-attaching.

IMPORTANT: Side Channels must **ALWAYS** be in contact with mounting surface along entire length of side channel.



2. Insert Side Channel Guide into Side Channels.

Please Note: Guides are labeled "L" (Left) and "R" (right).

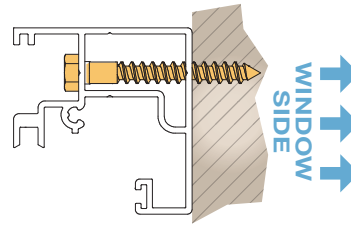


- 3.** Mark and drill Side Channels at desired mounting points on wall or jamb.

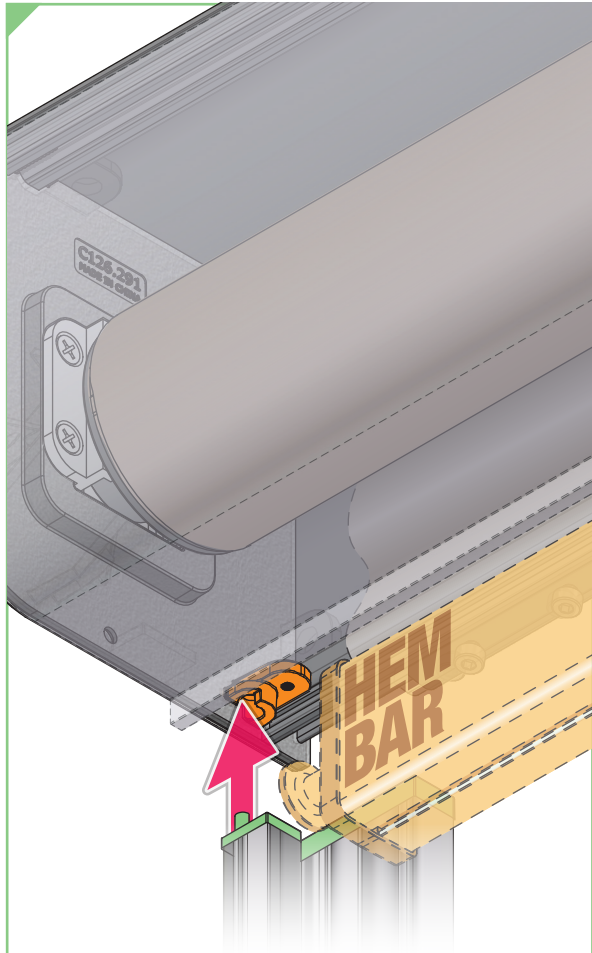
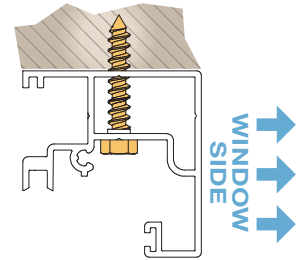
⚠ Caution:
DO NOT drill through Side Channel Guide!

Please Note:
Secure Side Channel to structure with appropriate fasteners spaced NO MORE THAN 24" (61cm) apart.

Wall Mounting

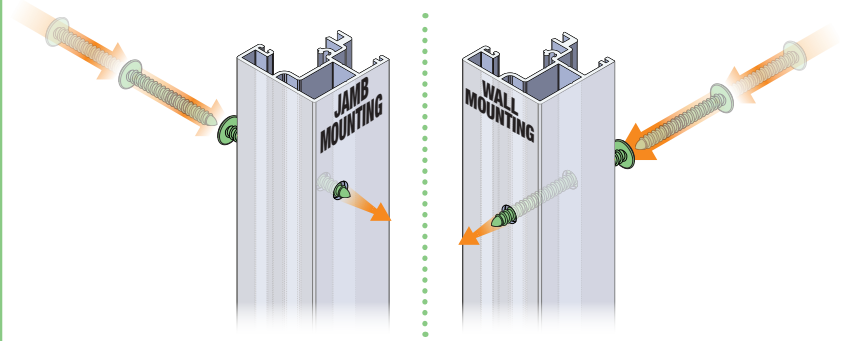


Jamb Mounting

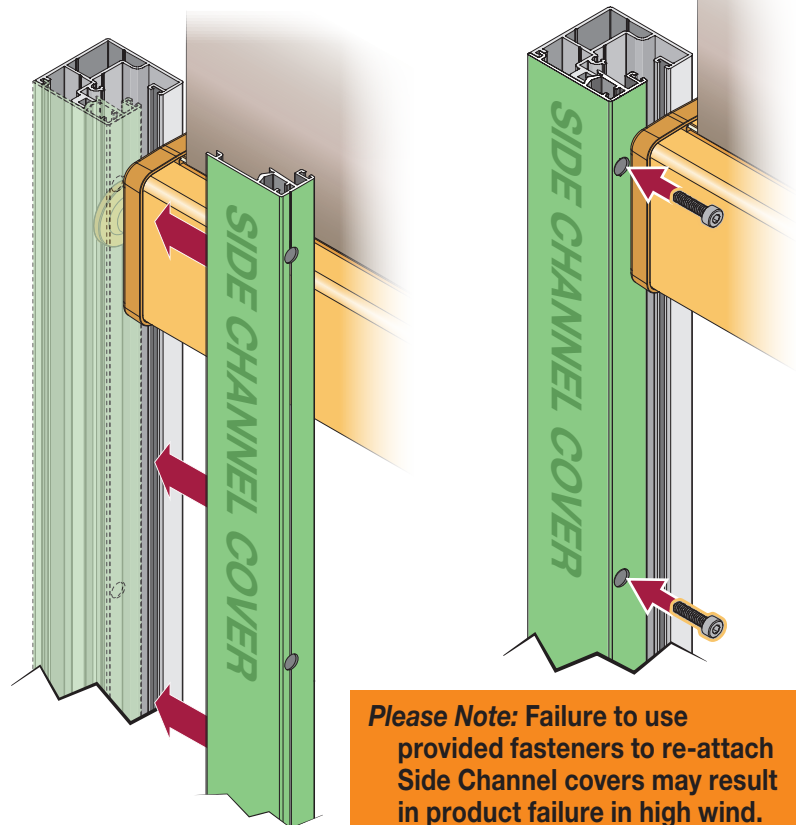


- 4.** Engage Side Channel Guide with alignment keyway on the bottom of Endcap.
- 5.** Insert Hem Bar into Side Channel, ensuring that side channel remains properly engaged with the Endcap. Repeat for the opposite Side Channel.

- 6.** Attach Side Channels to wall/structure, using appropriate fasteners.



- 7.** Re-attach Side Channel Covers, replacing the screws removed in Sec. 4, Step 1.



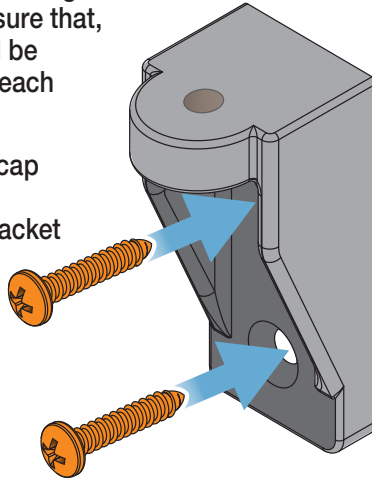
Please Note: Failure to use provided fasteners to re-attach Side Channel covers may result in product failure in high wind.

Section 4 - Installing Cable Guides Option

- 1. A.** Determine appropriate mounting location of Mounting Brackets. Ensure that, once attached, cables will be plumb and parallel below each cable attachment point.

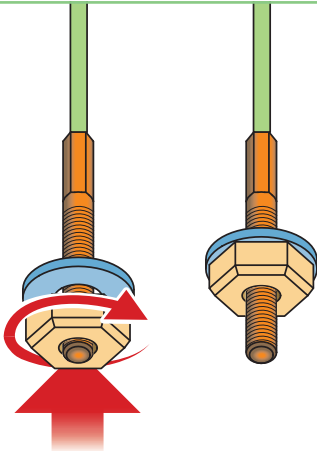
- B.** Use the centerline of Endcap Cable Mounting Hole and centerline of Mounting Bracket for alignment.

Tip: Run shade to desired down position to help determine exact bracket locations.

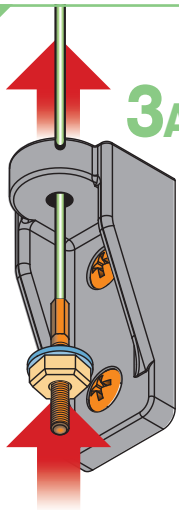


- C.** Install Mounting Bracket using appropriate fasteners. (Wall mount option shown.)

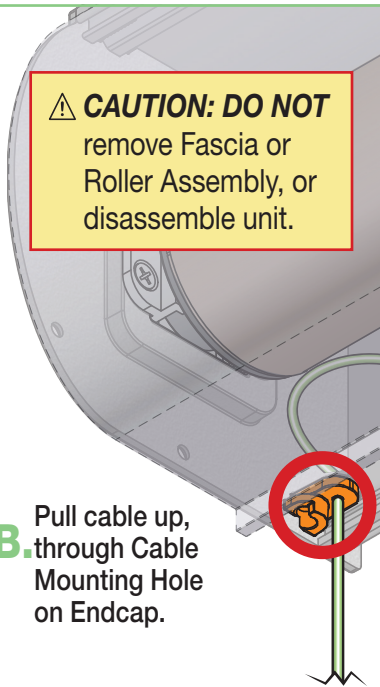
- 2.** Place washer and nut approximately halfway up threads of bolted end of cable to allow space for travel.



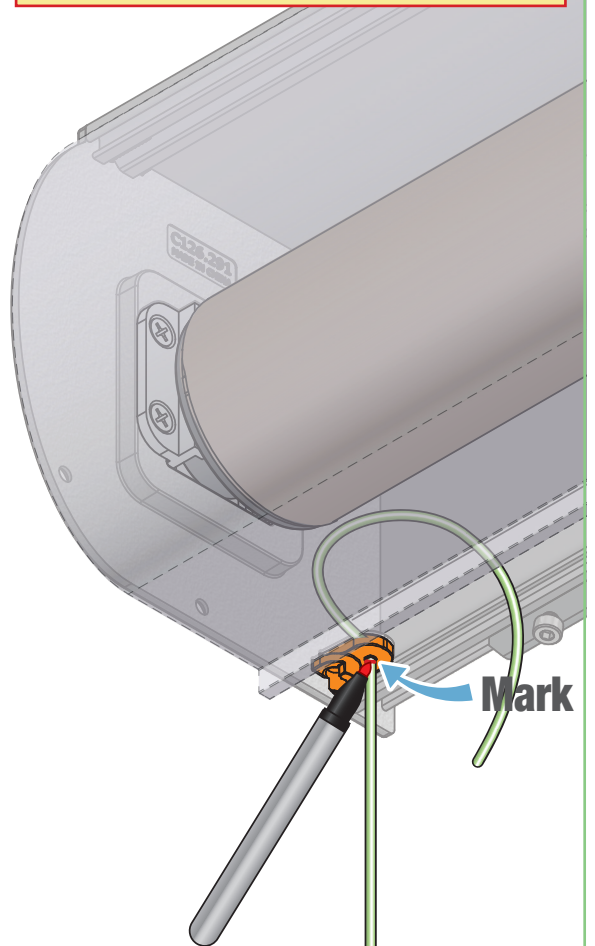
- 3A.** Pull cable up, through the Mounting Bracket (Wall mount option shown.)



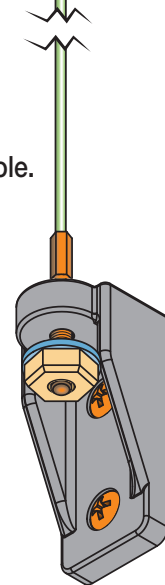
- 3B.** Pull cable up, through Cable Mounting Hole on Endcap.

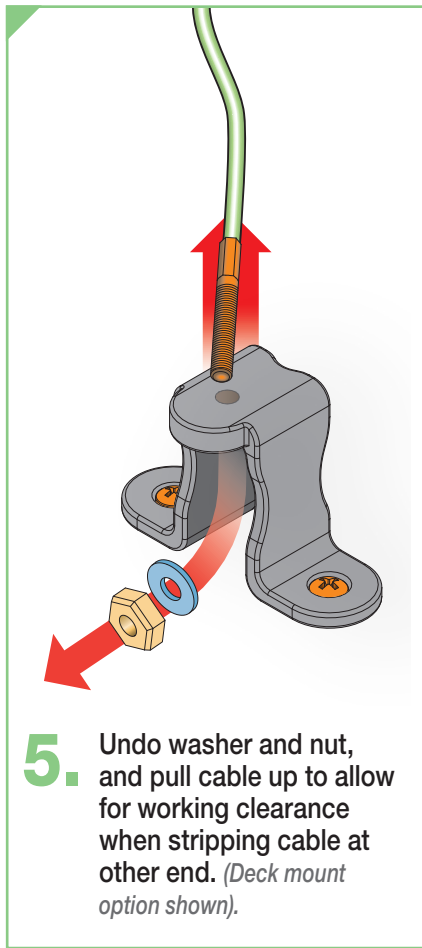


CAUTION: DO NOT remove Fascia or Roller Assembly, or disassemble unit.

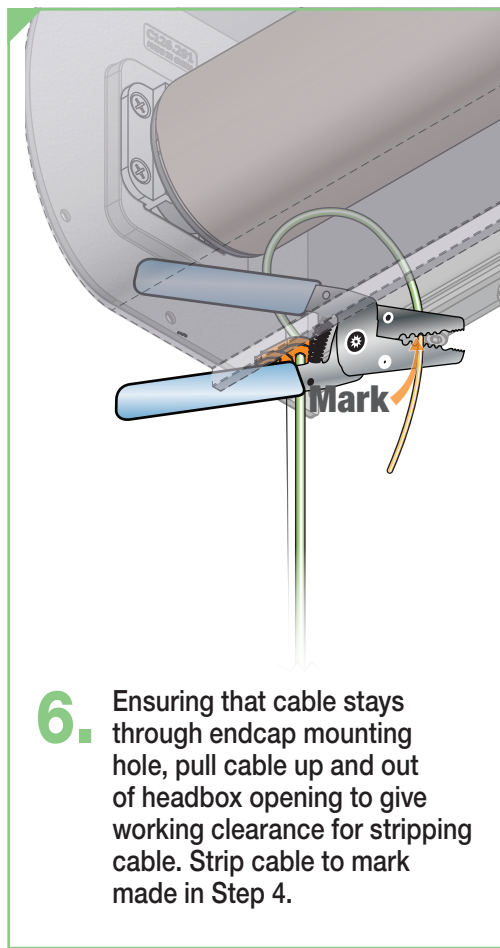


- 4.** Pull cable taut and mark cable under Cable Mounting Hole. (Wall mount option shown.)

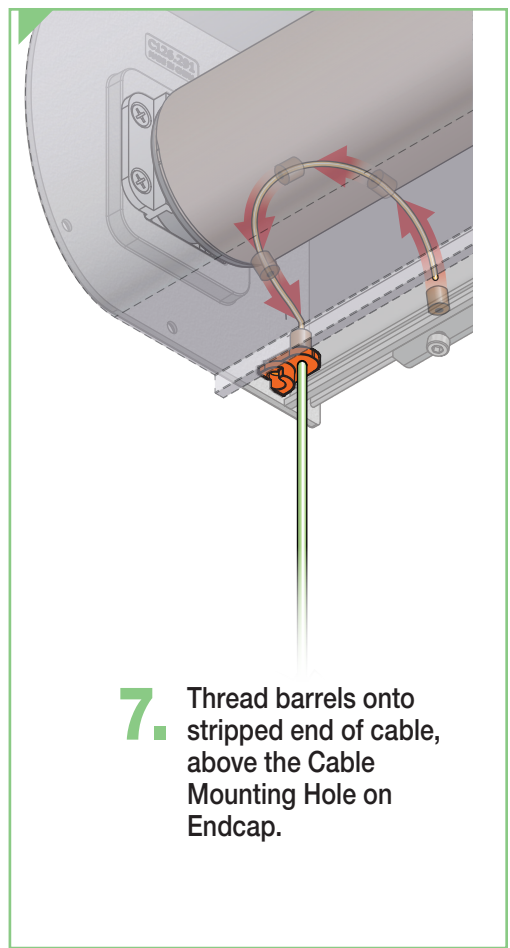




5. Undo washer and nut, and pull cable up to allow for working clearance when stripping cable at other end. (Deck mount option shown).



6. Ensuring that cable stays through endcap mounting hole, pull cable up and out of headbox opening to give working clearance for stripping cable. Strip cable to mark made in Step 4.



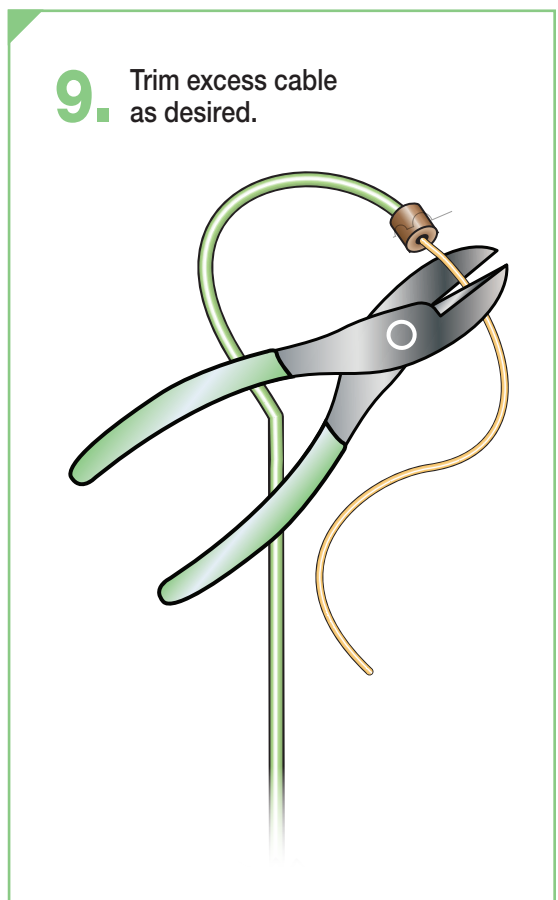
7. Thread barrels onto stripped end of cable, above the Cable Mounting Hole on Endcap.



8. Crimp the barrels approximately $\frac{1}{8}$ " (3mm) above mark.

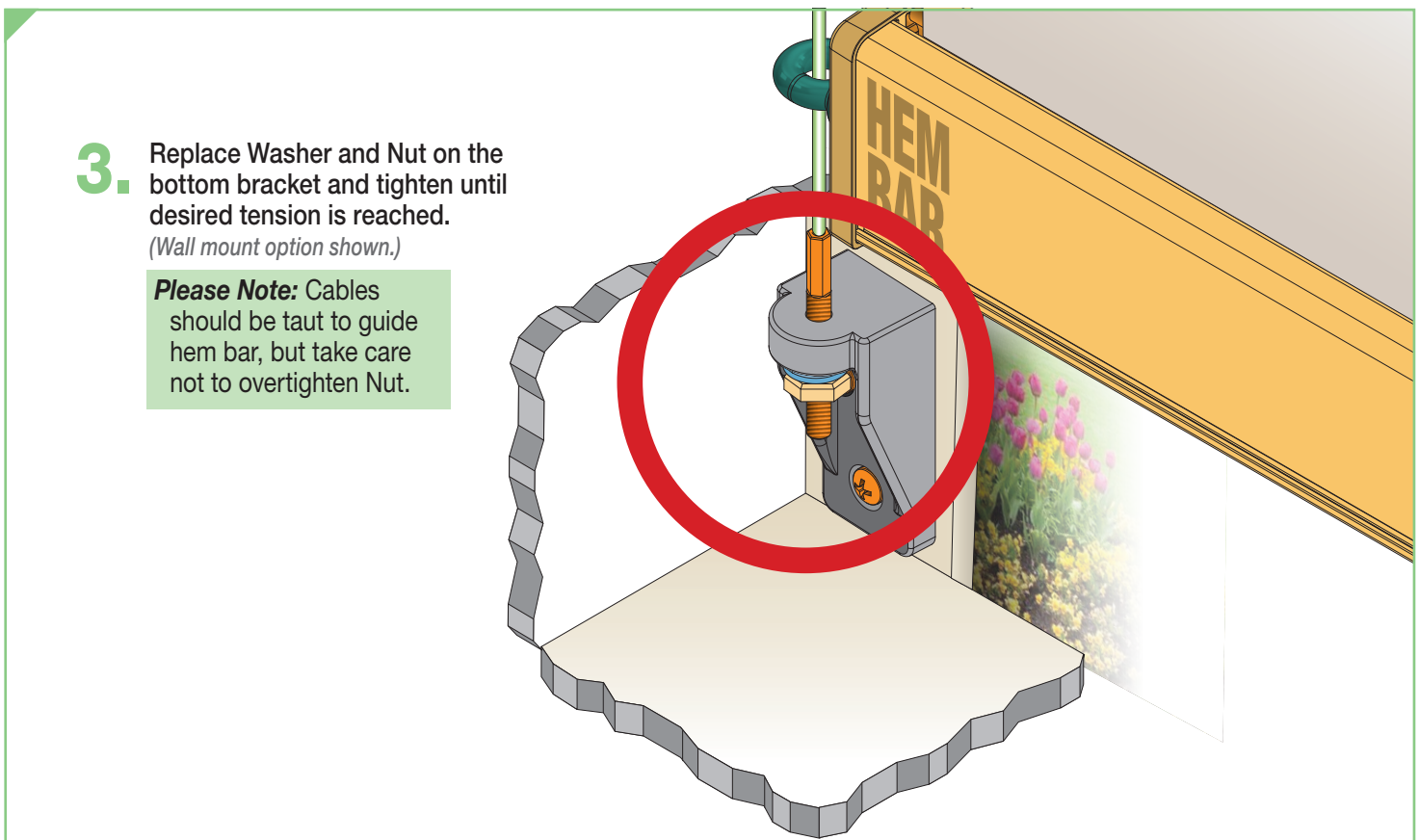
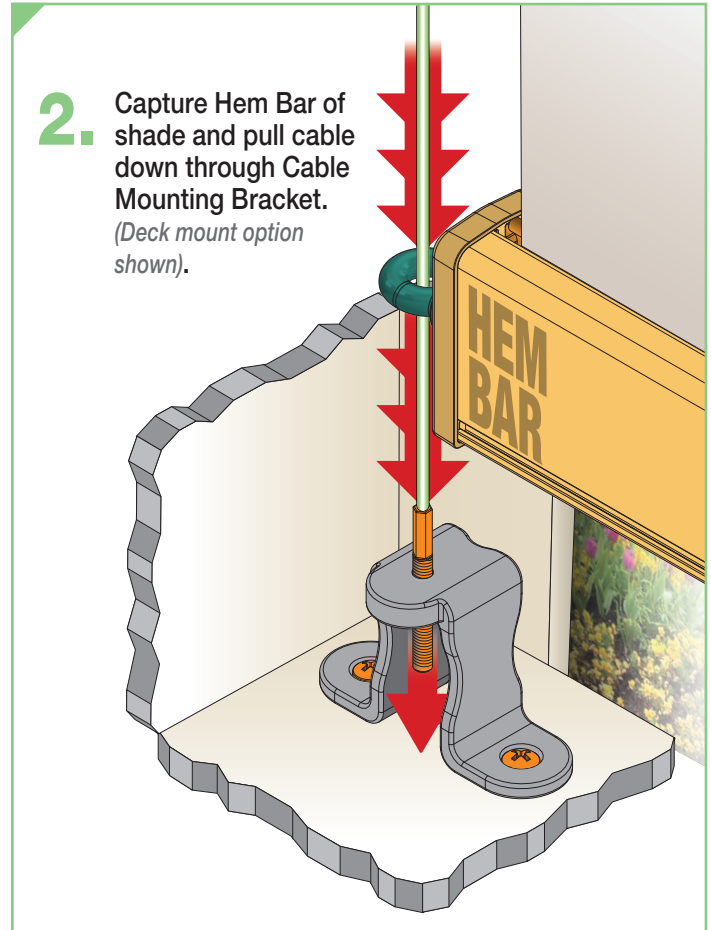
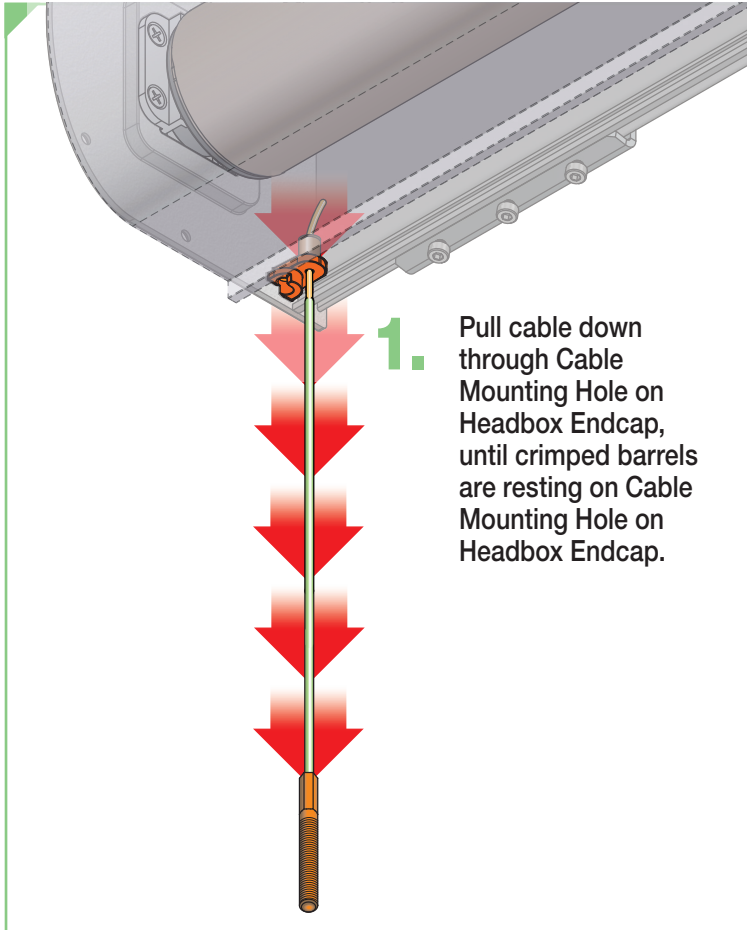


PLEASE NOTE:
Draper® recommends **32-VC:VG Crimper**, available from www.nicopress.com



9. Trim excess cable as desired.

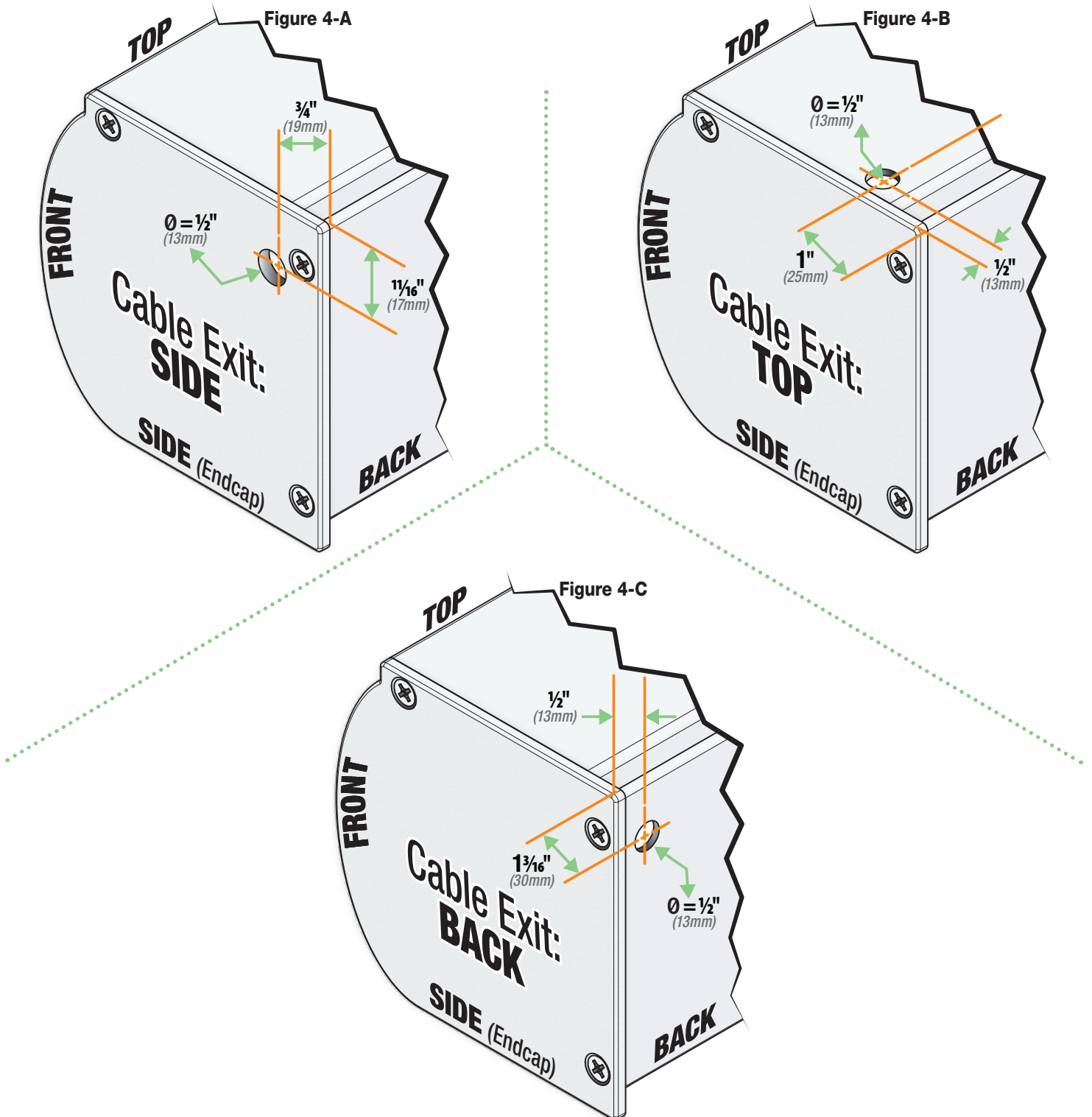
Section 5 - Securing Cable Guide



Section 6 - Cable Exit

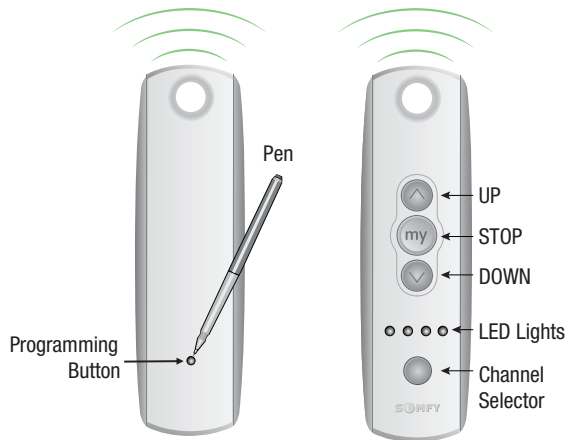
The Exterior Motorized FlexShade® can be ordered with a cable exit pre-drilled in the top or back of the Headbox. If no cable exit is specified, the cable is routed down and out the fabric opening under the motor.

Please Note: Right hand motor is shown.

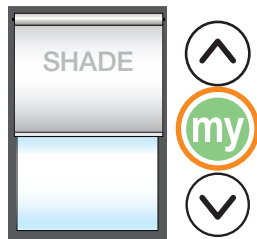
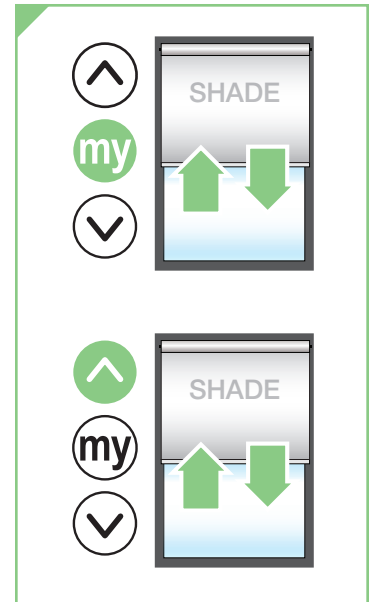


Section 7 - RF Remote Programming Instructions

Please Note: The motor ships with no programming. Follow these instructions to program unit to the desired transmitter.

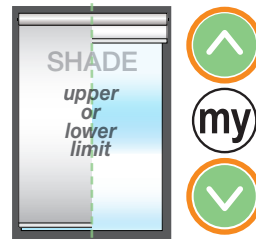


1. Select a transmitter channel to assign motor. Hold UP and DOWN buttons until motor jogs, then release.
2. Check motor direction. To reverse motor direction, hold MY/STOP button for 5 seconds until motor jogs. Check direction again.
3. Move motor to upper limit position. Hold MY/STOP and DOWN buttons until motor moves down, then release. Use UP and DOWN buttons to move shade to correct lower limit and press MY/STOP.
4. While motor is at lower limit, hold UP and MY/STOP buttons until motor moves up, then release. The shade should move to upper limit and stop.
5. Next, hold MY/STOP button until motor jogs.
6. Put motor into USER MODE by holding small programming button on the back of transmitter and waiting for motor to jog.



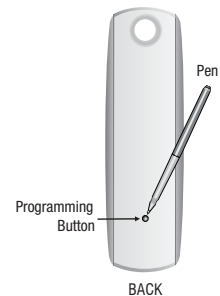
Setting an Intermediate Stop - Shade MUST BE in USER mode.

1. Move shade to desired mid-point location and hold MY/STOP button until motor jogs.
2. To test, press the MY/STOP button when motor is standing still. The shade will move to that intermediate location.
3. To delete an intermediate stop, go to the intermediate stop and hold the MY/STOP button until motor jogs.



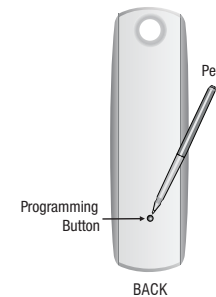
Adjust Limits in User Mode

1. Move motor to limit (*upper or lower*) to be changed. Shade must move to previously set limit and will stop automatically.
2. Hold UP and DOWN buttons until motor jogs.
3. Move motor to its new limit location and hold MY/STOP button until motor jogs.



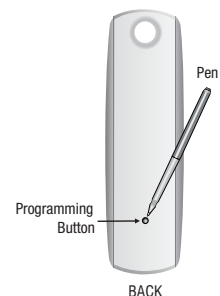
Add a Channel - Shade MUST BE in USER mode.

1. Select channel currently operating motor, then hold programming button until motor jogs.
2. Select new channel to add to motor, then hold programming button until motor jogs.
3. The motor should now work on both the old and new channel.



Reset Motor

1. Disconnect for 3 seconds, reconnect for 10 seconds, disconnect for 3 seconds. Shade will roll.
2. Hold program button on remote and wait for 2 separate jogs. Motor is now reset.



Delete a Channel - Shade MUST BE in USER mode.

1. Select channel operating motor desired, then hold programming button until motor jogs.
2. Select channel to remove, then hold programming button until motor jogs. Motor should now only work on channel kept from Step 1.

Section 8 - Limit Switch Adjustments

Standard and Quiet Motors

⚠ Caution: Unit ships without limits. Limits will need to be set before the unit is operated. Always be prepared to shut off manually when new adjustment is being tested.

Push Button Limits

1. Fully depress both limit switch push buttons, then operate wall switch to make sure system works properly.
2. Raise shade to desired "UP" stop position.
3. Set upper limit by depressing proper (back) push button.
4. Lower shade to desired "DOWN" stop position.
5. Set lower limit by depressing proper (front) push button.

Screw-Type Limits

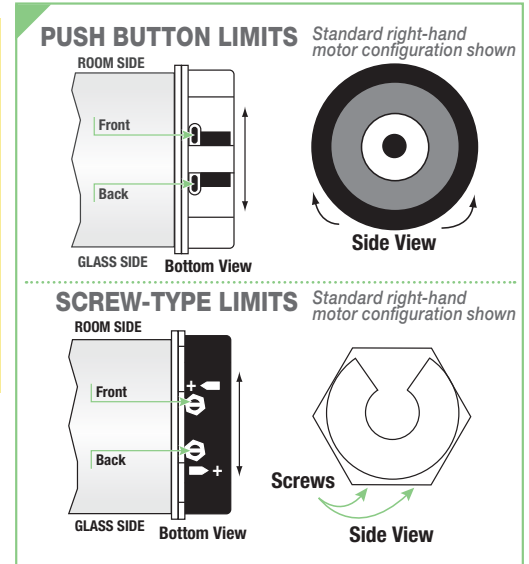
1. Determine which direction of fabric travel corresponds with arrows on motor.
2. Operate shade to desired "down" stop position. Set limit by turning proper socket toward "+" to lower limit, and "-" to raise it.
3. Operate shade to desired "up" stopping position. Set limit by turning proper screw toward "-" to raise limit, and "+" to lower it.

Please Note: Each full rotation of the limit screw equals approximately $\frac{1}{8}$ " (16mm) of shade travel, which may require rotating the limit screw several times.

⚠ Caution: DO NOT allow the hem bar to hit the upper roller or fascia. This will damage the unit.

⚠ Caution:

- Be sure all switches are in "off" position before adjusting limit switches.
- Shade may be damaged by running shade fabric up too far and exposing roller.
- If using a group control system, each limit switch must be set prior to connecting to system.
- Motor must be installed so limit switches are pointed up or accessible.



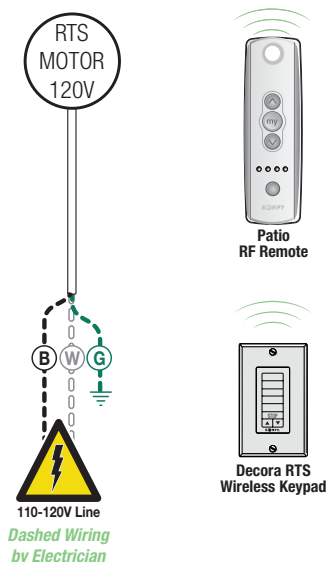
Section 9 - Complete Electrical Connection

Operates on 110-120V, 60 Hz. current. Shade is shipped with internal wiring complete and control switch(es) fully boxed, and supplied with a 6' (183cm) cable lead (standard). Longer lead can be substituted by removing two screws in motor end of roller, removing lead, plugging new lead in, and replacing screws. Wire to connect shade to switch(es) and switch(es) to power supply should be furnished by installer. Connections should be made in accordance with attached wiring diagram, and wiring should comply with national and local electrical codes.

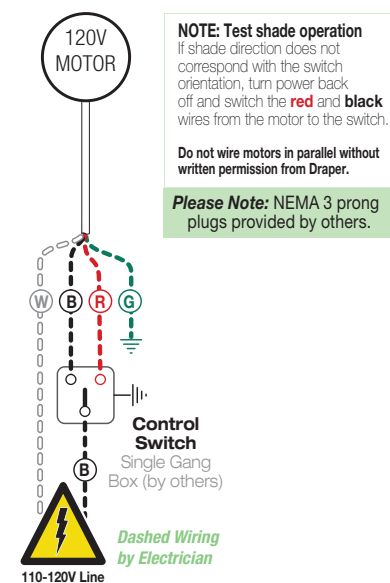
DO NOT wire motors in parallel without written permission from Draper.

⚠ All operating switches should be "off" before power is connected.

Controls & System Overview Sonesse® RTS 120VAC Motors

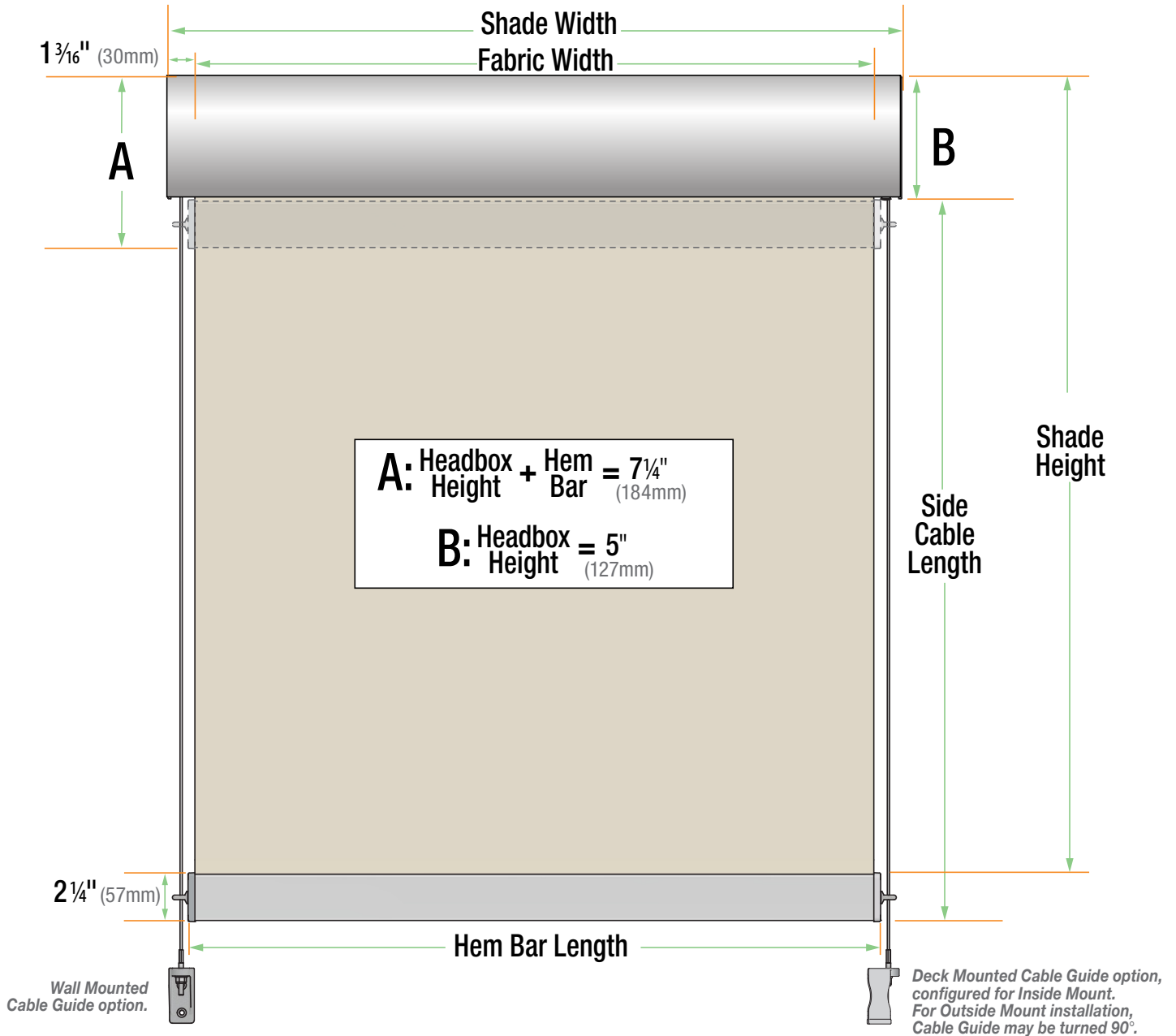


Controls & System Overview Sonesse® 120VAC Motors



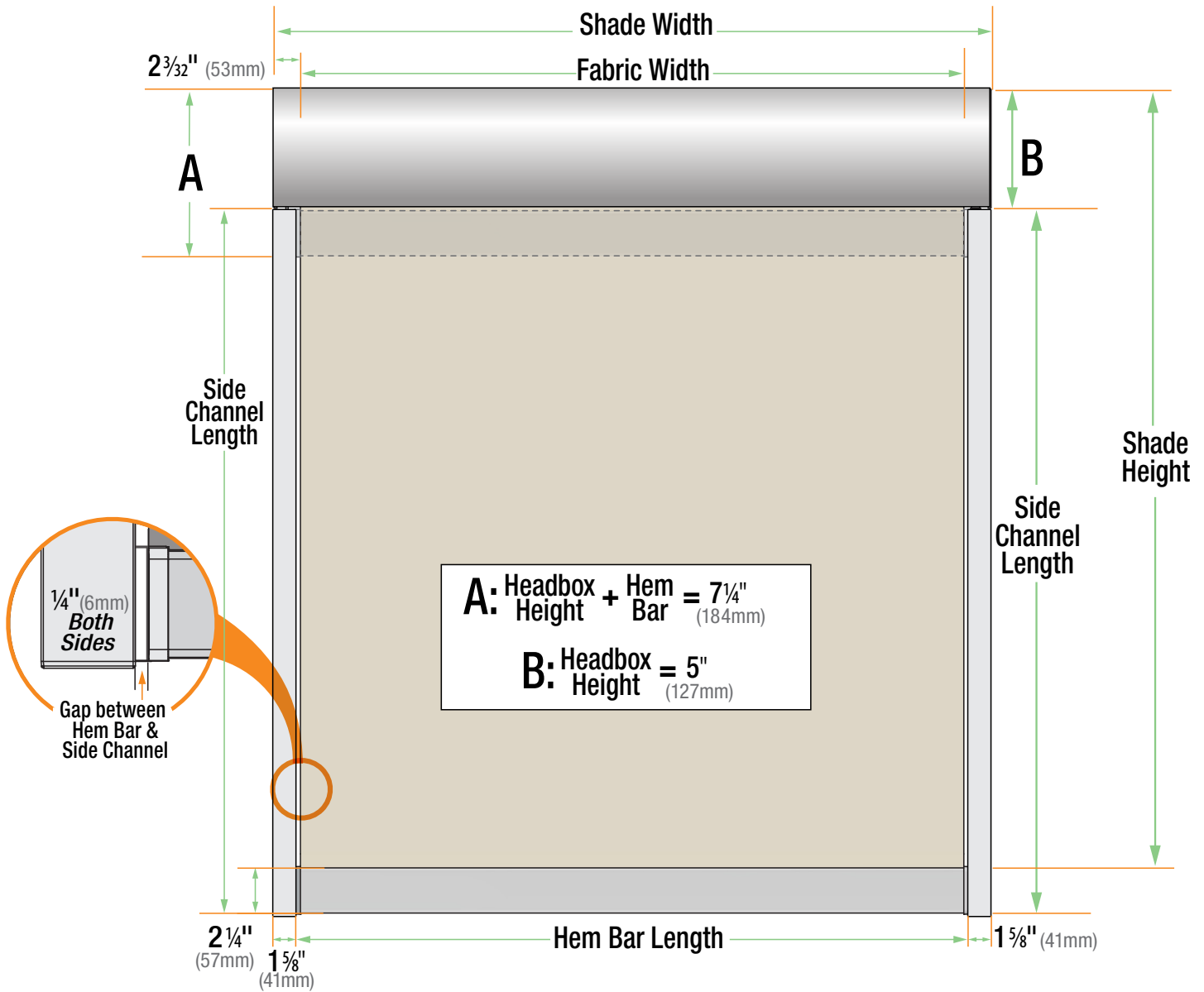
Section 10 - Assembled Dimensions: Front View

Cable Guide Option



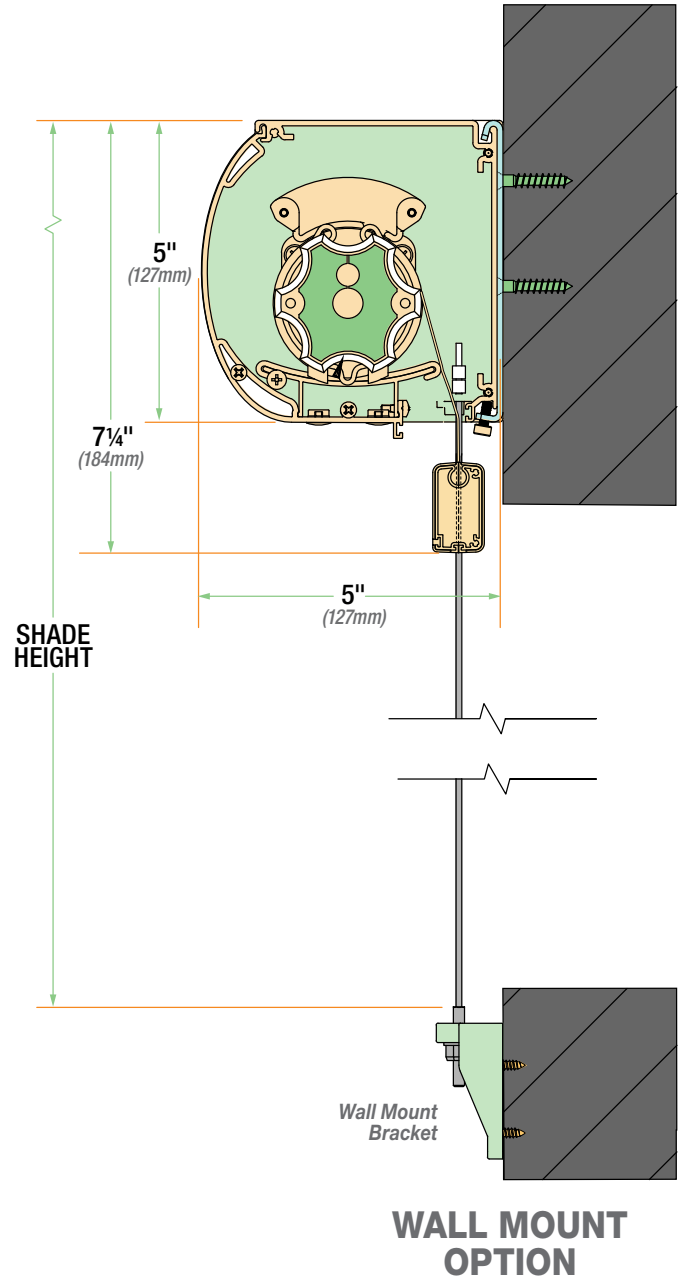
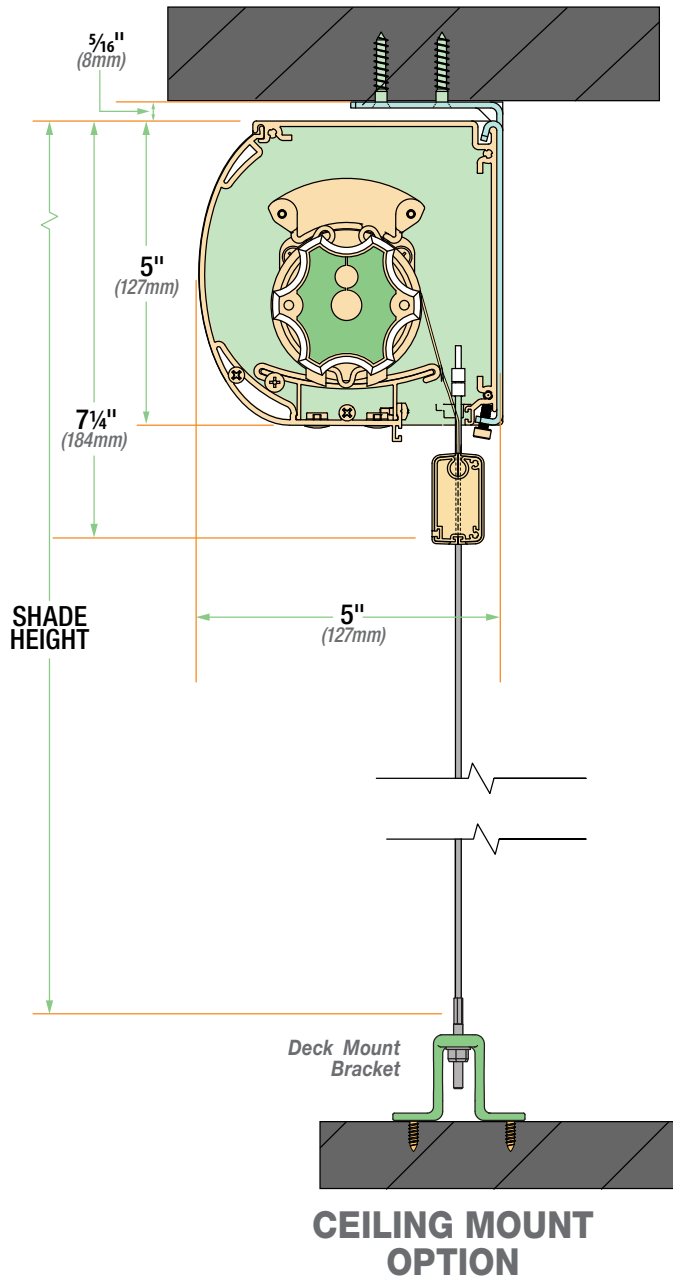
IMPORTANT: Side Channels must be installed parallel, plumb, and square, with a tolerance of +/- 1/8" (3mm).

Side Channel Option



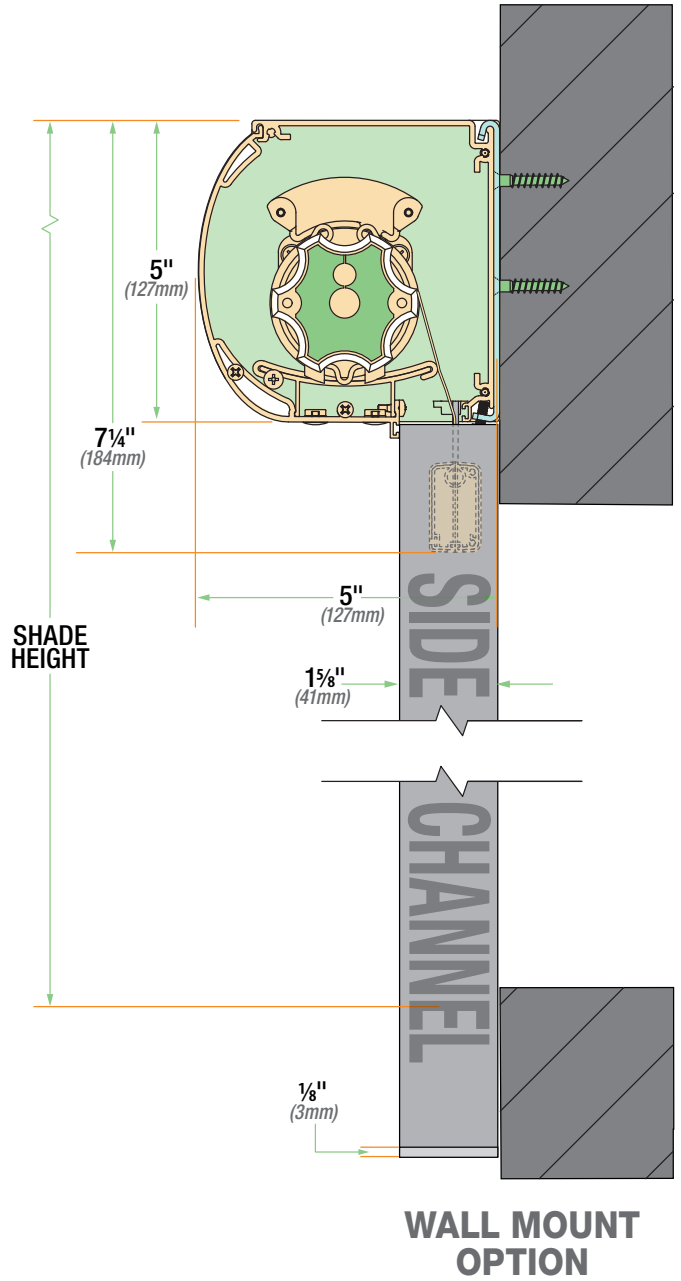
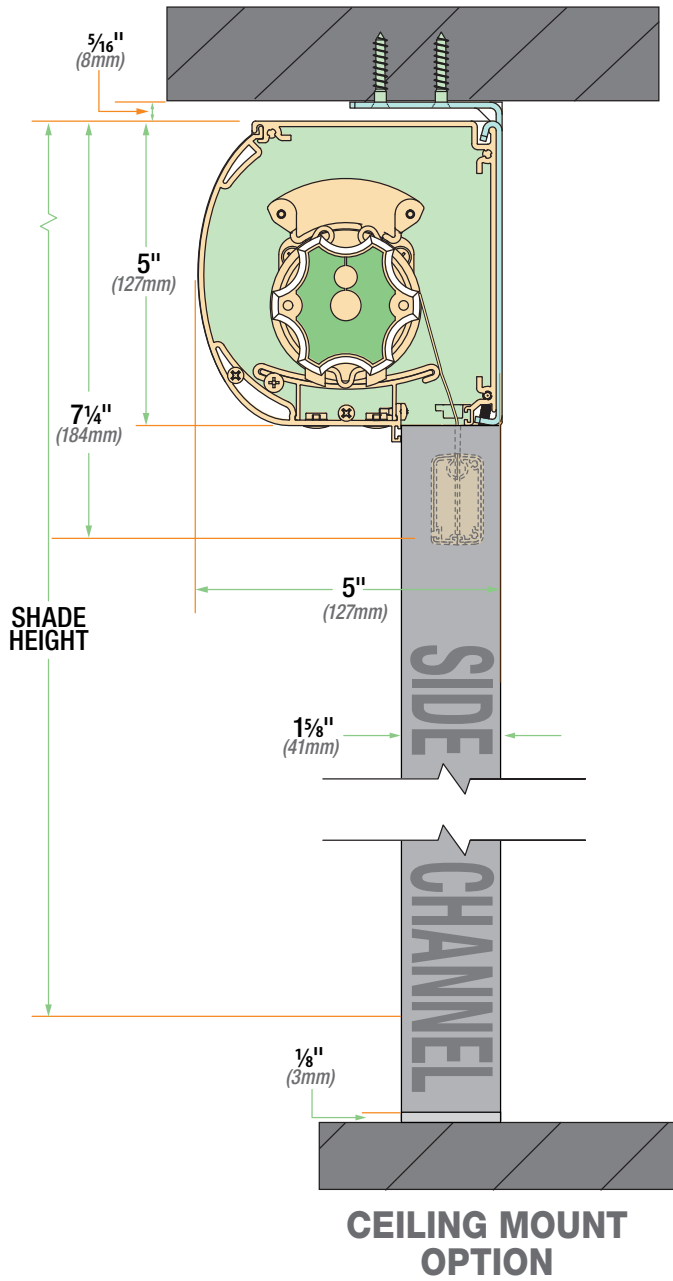
Section 11 - Dimensions: Side View

Cable Guide Option



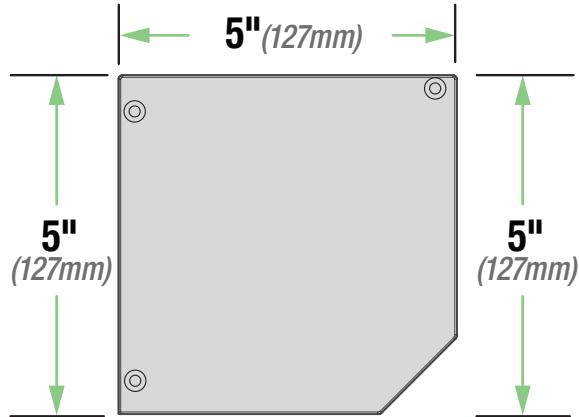
Side Channel Option

See Section 3 on Page 4 for Side Channel mounting instructions.

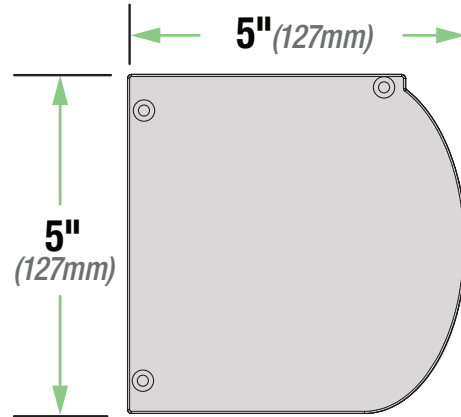


Section 12 - Dimensions: Components

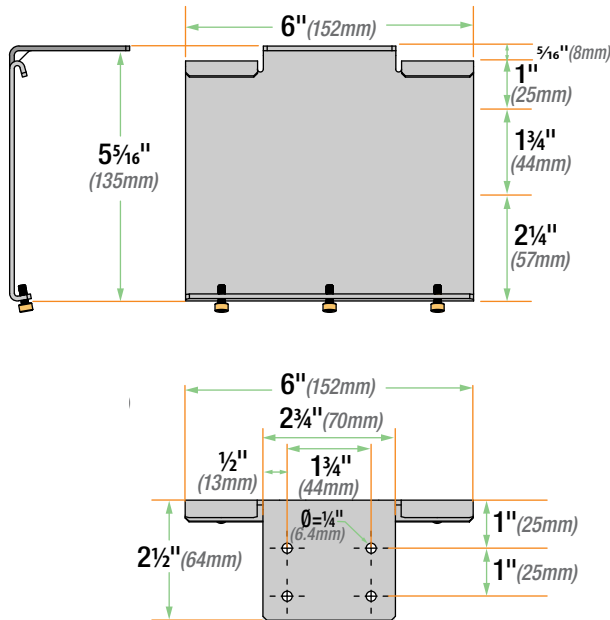
Angled Headbox



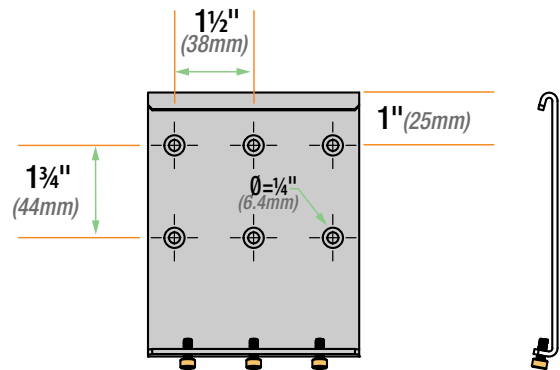
Curved Headbox



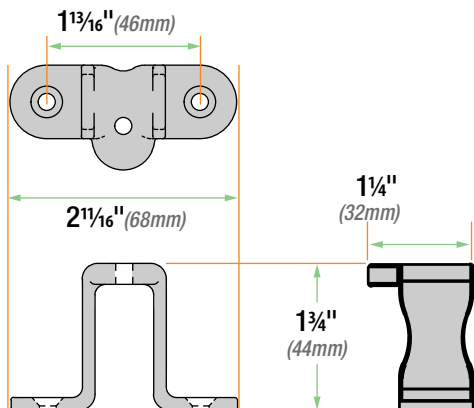
Ceiling Mounting Bracket



Wall Mounting Bracket



Cable Guide - Deck Mount



Cable Guide - Wall Mount

