

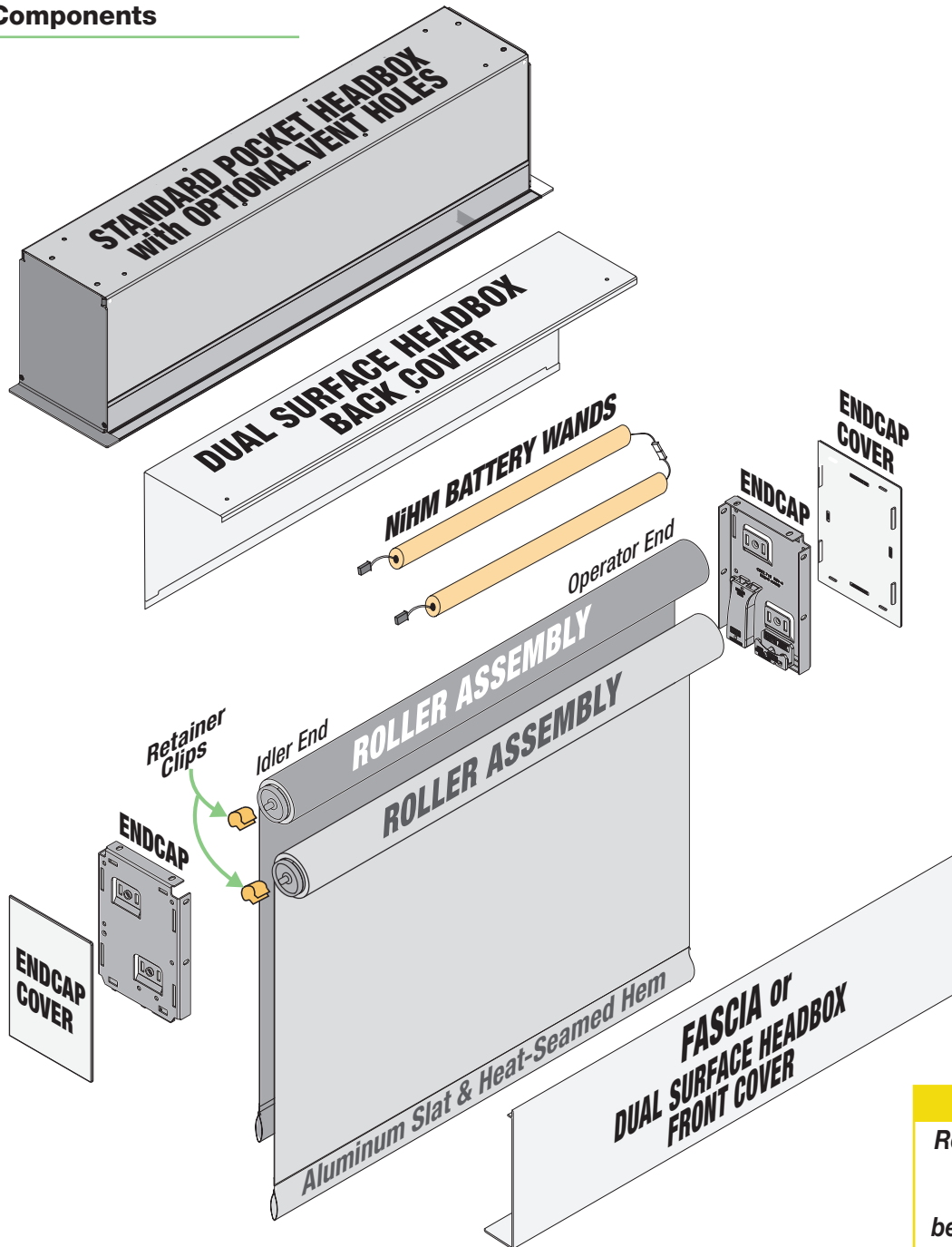
# Dual Roller 12V Battery FlexShade®

No wiring or electrician, rechargeable motorized dual roller window shade

## INSTRUCTIONS INSTALLATION & OPERATION

### Overview - Components

DFBA



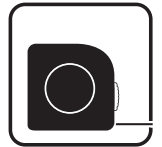
#### TOOLS REQUIRED



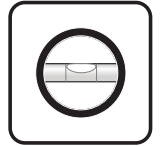
Pencil



Power Drill



Tape Measure



Level



Hardware  
(by Others)

#### ⚠ CAUTION ⚠

Read and understand all warnings (Page 2 of this document) before beginning installation.

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If you have any difficulties installing or servicing your Dual Roller Battery FlexShade, 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.
3. Before mounting shades, verify measurements on label provided with shade, and ensure unit is installed at correct width.
4. Before connecting switches, controls, or electrical, ensure that power is turned **OFF**. Wiring indicated in diagram by dashed lines must be completed by an electrician.
5. Do not wire motors in parallel without written permission from Draper.
6. All endcaps, fascia, pocket headbox, and other hardware must be installed level. Shades must be level and square.
7. **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.**
8. **Installer is responsible for selecting mounting hardware appropriate for site conditions.**

## PLEASE READ - Safety Information

### Important Safety Information



## WARNING



### Important Safety Information

**Improper installation and use of the Dual Roller 12V Battery FlexShade® 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. 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.
14. 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.
15. 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.
16. 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.
17. Failure to precisely follow installation guidelines invalidates all warranties.
18. 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 high quality gaffer tape about 1" (25mm) wide on the exposed roller (*where the fabric will cover it*) on the side that the fabric will be drawn toward. For example: if the fabric is tracking to the left, place the tape 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 Flocké and Phifer SW7000® fabrics, which must be cleaned with a dry art sponge. (*SheerWeave® is a registered trademark of Phifer® Incorporated. Flocké® is a registered trademark of Mermet® Incorporated.*)

## Section 1 - Mounting Endcaps (Brackets)

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

1. Snap endcap covers onto endcaps. The proper orientation of **Left-Hand, Right-Hand, Front and Back** is molded into endcap covers (Fig. 1).
2. Mark wall, jamb, or ceiling for placement of mounting endcaps.
3. Drill small starter hole (if necessary) in mounting surface.
4. Mount endcaps using appropriate fasteners for surface.

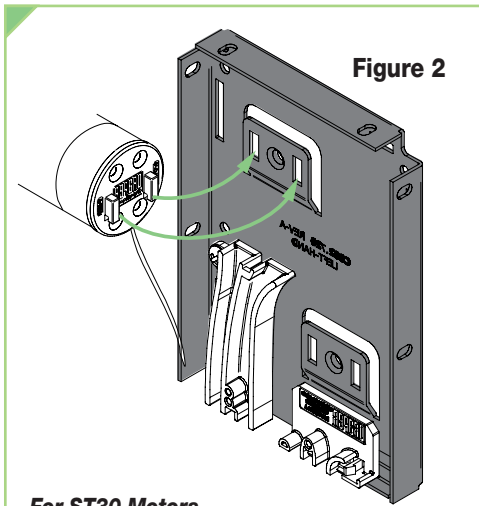
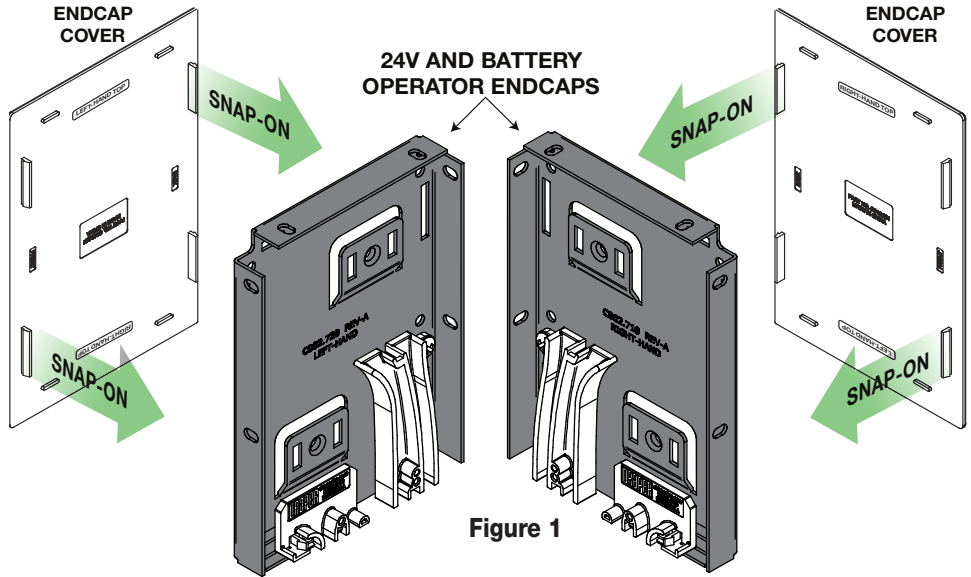


Figure 2

### For ST30 Motors

1. Place rear shade spring-loaded pin in idler endcap.
2. Depress spring-loaded pin by pressing the shade roller toward the endcap.
3. Slip operator end of rear shade into slots on operator end endcap (Fig. 2).
4. Repeat with front shade.

### For Battery-Powered Motors

1. Mount Battery Wands to wall using provided Mounting Clips (Fig. 3). Locate the battery wands where they can reach the motor without interfering with shade/roller operation.

**Please Note:** If mounting the battery wands vertically, small plastic grips are provided to slide onto the battery pack and create a snugger fit in the bracket.

2. Place rear shade spring-loaded pin in idler endcap, depress spring-loaded pin by pressing the shade roller toward the endcap and slip the operator end of rear shade into slots on operator endcap (Fig. 2).
3. Connect battery packs together, and to motor.
4. Repeat with front shade.

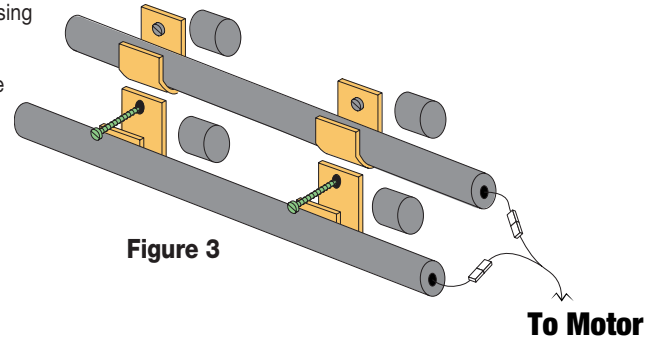


Figure 3

## Section 2 - Installing Fascia

1. Place groove along top of fascia over end caps, and snap into place (Fig. 4). **Fascia is not fully seated until it clicks into place on both ends.**
2. **Once in place, check for secure fit. If not secure, secure with appropriate fastener (not included).**

**PLEASE NOTE: Refer to appropriate sections within this document for different installation options:**

**SECTION 3:**  
Surface Headbox Installation

**SECTION 4:**  
Pocket Headbox Installation

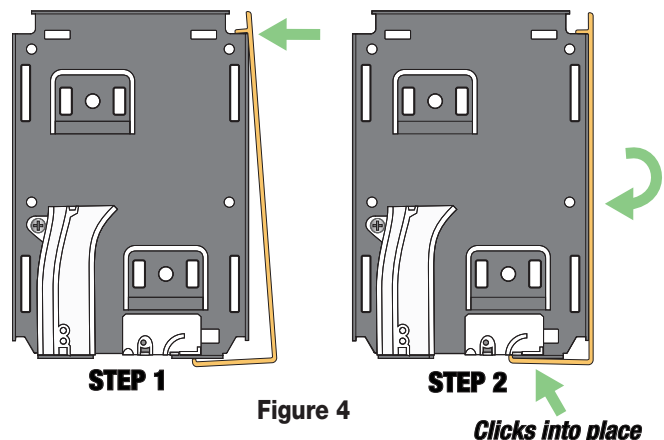
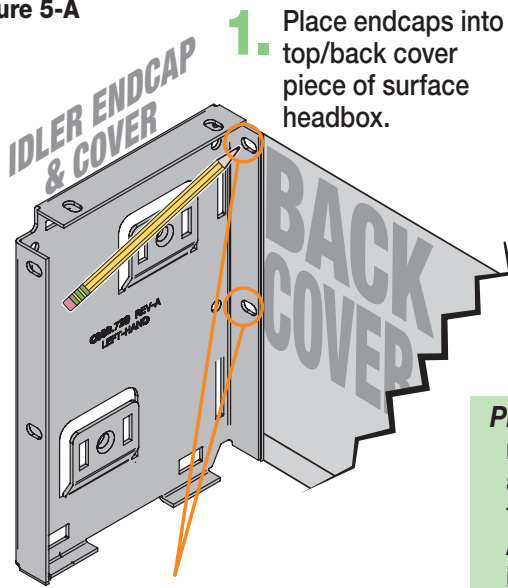


Figure 4

**Clicks into place**

## Section 3 - Dual Roller Surface Headbox Installation

Figure 5-A

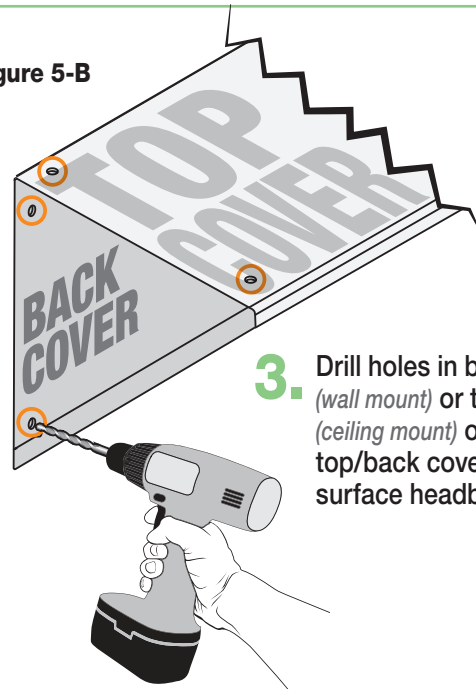


1. Place endcaps into top/back cover piece of surface headbox.

2. Using pre-drilled holes in endcaps, mark headbox for drilling.

**Please Note:** Installer must provide adequate clearance for removal of Roller Assembly during installation and maintenance.

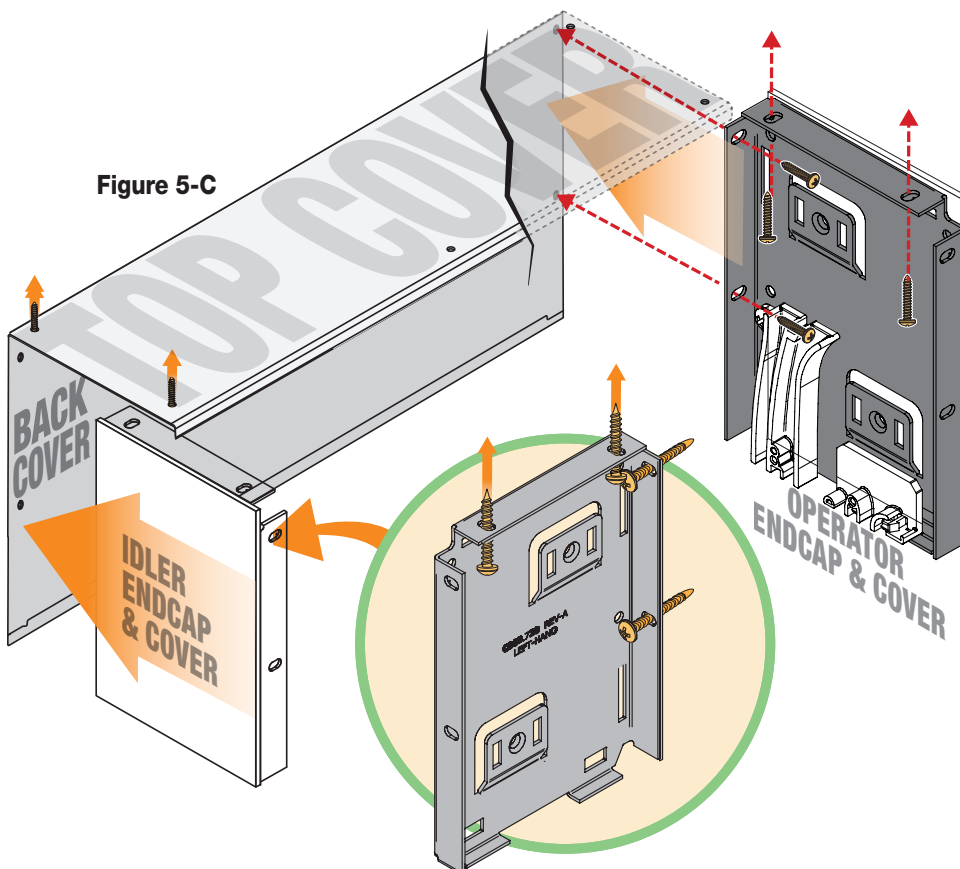
Figure 5-B



3. Drill holes in back (wall mount) or top (ceiling mount) of top/back cover of surface headbox.

**Please Note:** Headbox MUST BE mounted directly to ceiling or wall, or to a continuous blocking that has been secured to building structure.

Figure 5-C



4. Attach endcaps and top/back cover piece to wall or ceiling, using mounting hardware appropriate for site conditions.

**Please Note:** A minimum of two (2) screws is required for each endcap.

Next, mount roller assemblies (Section 1).

## Section 4 - Pocket Headbox Installation

**PLEASE NOTE:** Installer must provide adequate clearance for removal of Roller Assembly during installation and maintenance.

**PLEASE NOTE:** Headbox must be mounted directly to ceiling, or to a continuous blocking that is secured to building structure.

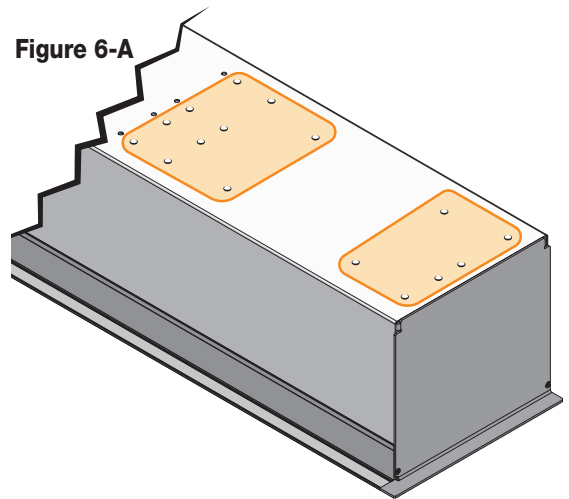
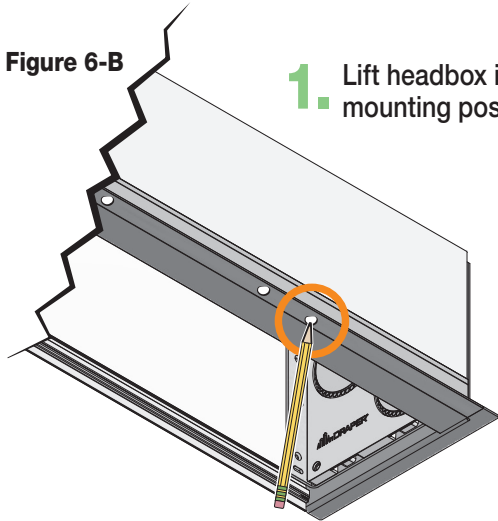


Figure 6-A

Figure 6-B

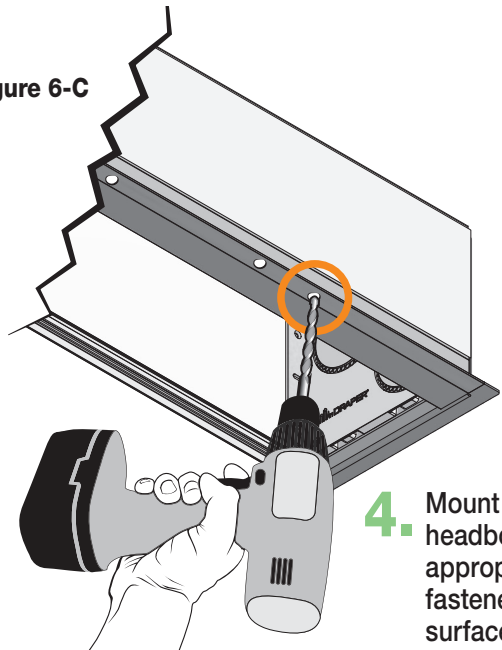
1. Lift headbox into mounting position.



2. Mark location of optional pre-drilled pocket mounting holes and endcap mounting holes on top side of headbox on mounting surface.

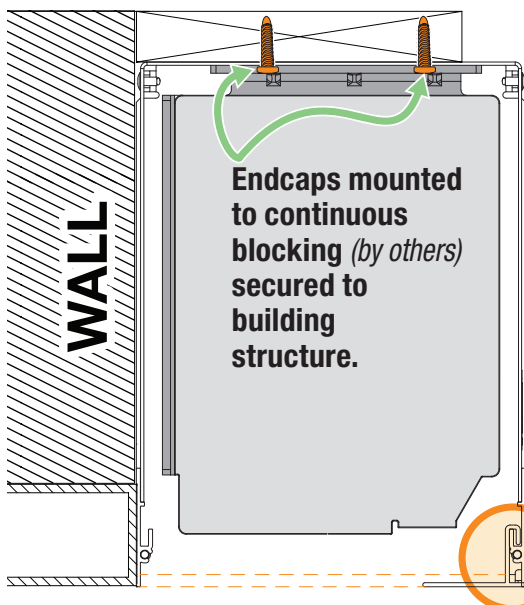
3. Drill small starter hole (if necessary) in mounting surface.

Figure 6-C



4. Mount pocket headbox using appropriate fasteners for surface.

Figure 6-D



Endcaps mounted to continuous blocking (by others) secured to building structure.

Closure Panel

Headbox

Closure Panel

Headbox

Ceiling (by others)

5. Mount endcaps using appropriate fasteners for surface (Section 1).

6. Mount pocket closure. (Fig. 6-D).

## Section 5 - Limit Switch Adjustments

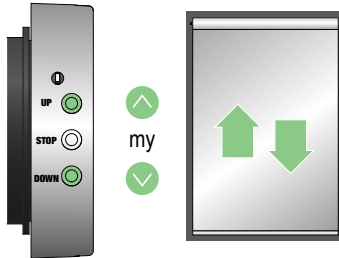
### ⚠ Caution:

- Be sure all switches are in "off" position before adjusting limit switches. Be prepared to shut off manually while testing.
- Shade may be damaged by running shade fabric down too far to expose 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 down.

### Limit Switch Adjustments

1. Switch on the power supply. The LED switches ON.
2. Press Up and Down buttons on RTS control point OR Motor head at the same time: The shade moves up and down (*fast raising and lowering*), and commissioning process begins.

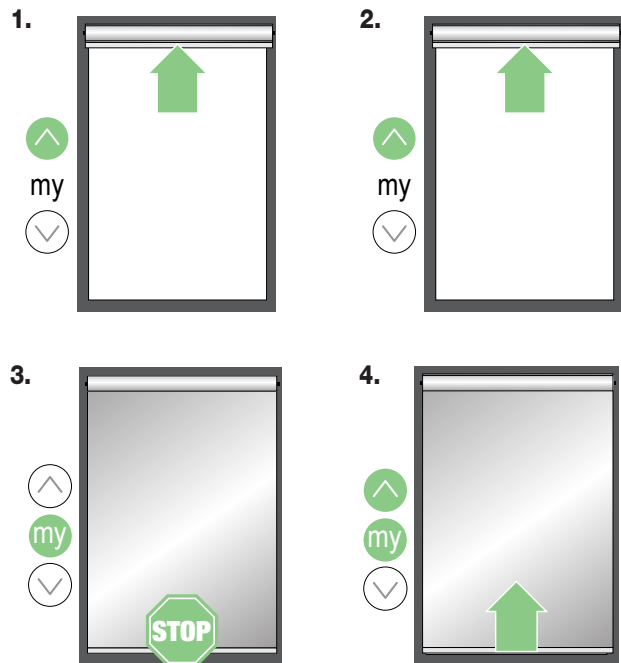
The RTS control point is pre-programmed in the motor.



### Setting the end limits

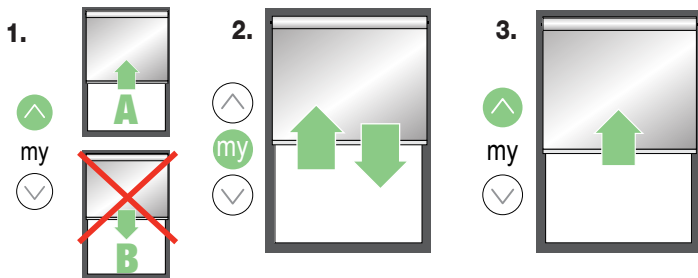
The end limits can be set in any order.

1. Raise shade to desired position by pressing Up button.
2. Press my / stop and Down buttons at the same time until shade moves. The upper end limit is memorized.
3. Press my / stop button when the shade reaches the desired lowered position. If necessary, adjust the position of shade using the Up and Down buttons.
4. Press my / stop and Up buttons at the same time until shade moves. **The lower end limit is memorized. The shade rises and stops in raised position.**



### Checking the direction of rotation

1. Press Up button on the RTS control point / Motor head:
  - a) If the shade rises (A), the direction of rotation is correct: Move onto the section entitled "Setting the end limits".
  - b) If shade lowers (B), the direction of rotation is incorrect: Move onto the next step.
2. Press my / stop button on RTS control point / Motor head until shade moves up and down: **The direction of rotation has been modified.**
3. Press Up button on RTS control point / Motor head to check the direction of rotation.



### Validation of the setting

To confirm end limits, press my / stop button until shade moves up and down.

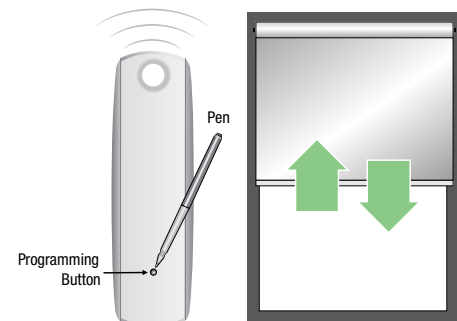
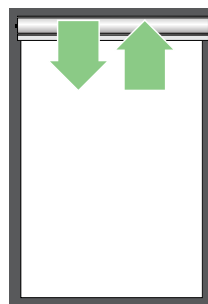
**The end limits are programmed and the LED switches OFF.**

### Recording the RTS control point

The motor is in programming mode:

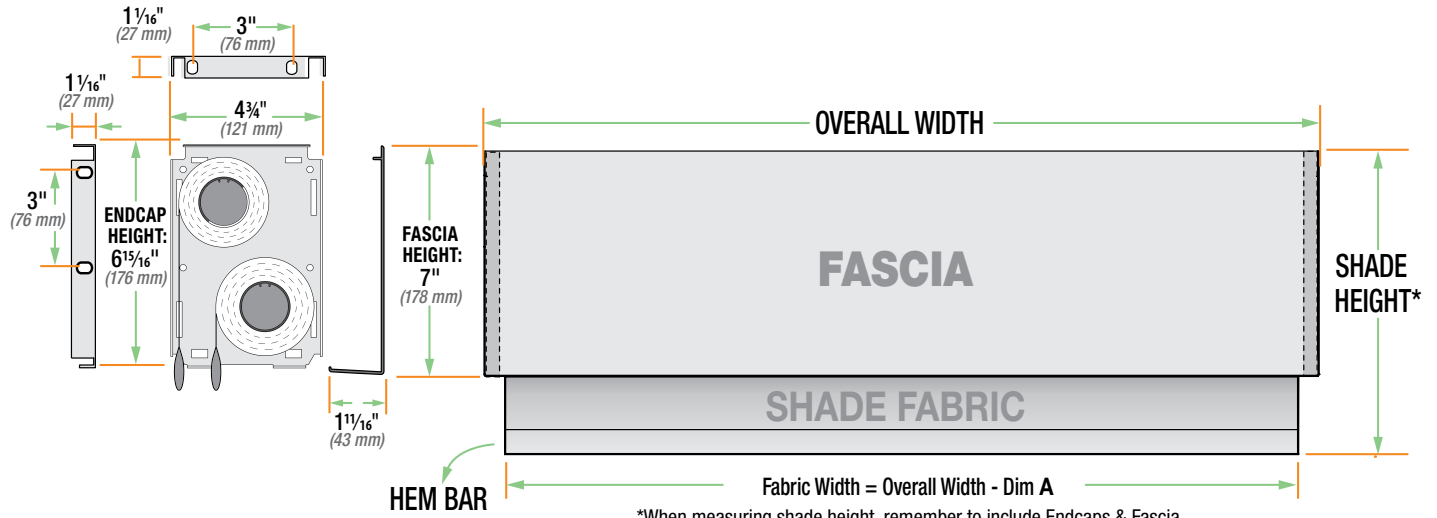
Quickly press the PROG button on the RTS control point to be programmed:

**The shade moves up and down: this RTS control point is now programmed.**

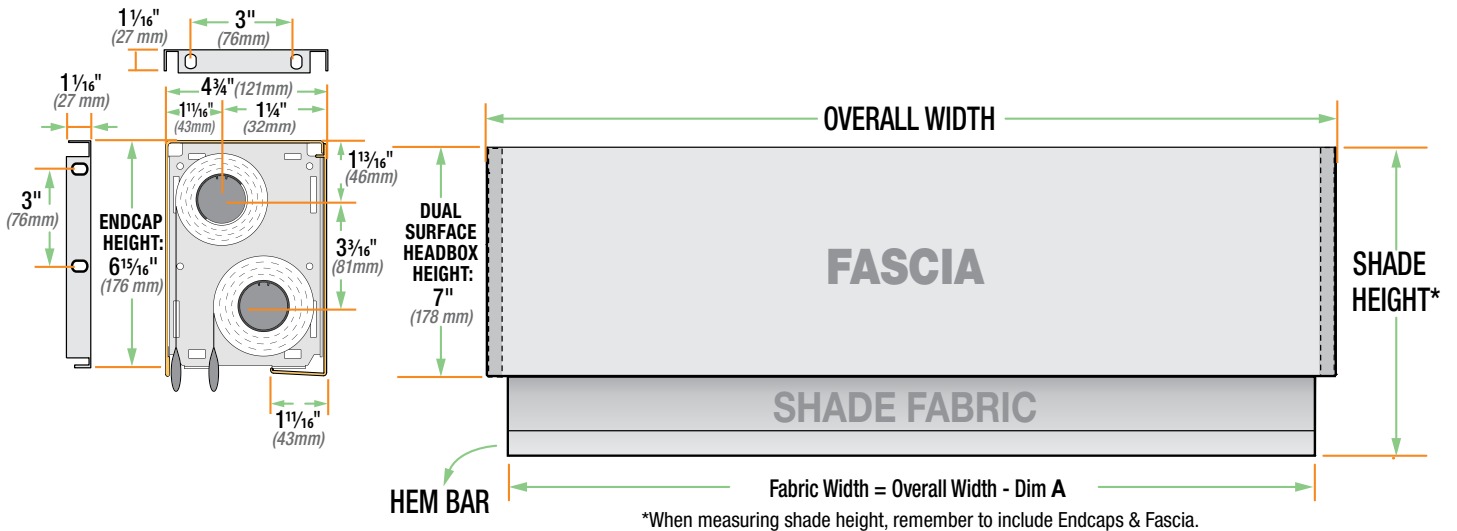


## Section 6 - Standard Hardware Dimensions

### Endcap & Fascia Dimensions



### Dual Roller Surface Headbox Dimensions



### Dual Roller Pocket Headbox Dimensions

