Overview - FlexShade Zip Components

- Headbox
- Cassette Style Ceiling or Wall Mounting Brackets
- Side Channel
- Shade Fabric
- Hem Bar engaged in Side Channel

**CAUTION**

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

If you have any difficulties installing or servicing your FlexShade Zip, call your dealer or Draper, Inc.
Important Safety Information

**WARNING**

Improper installation and use of FlexShade Zip can result in serious injury or death.
Primarily, injuries can occur when the FlexShade Zip falls due to imprecise installation, mishandling of the FlexShade Zip 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 fail or otherwise fail, and could result in serious injury.
2. Installation and calibration of the FlexShade Zip 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 walls 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, head boxes, pockets, wall clips, and other hardware must be installed level. FlexShade Zip must be level and square.
6. Never leave the area while operating the FlexShade Zip 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 FlexShade Zip should be performed only by authorized and qualified personnel, who have been trained in the safe and effective operation of the FlexShade Zip & understand its safety features.
15. The safety features of the FlexShade Zip, 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. FlexShade Zip 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 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 FlexShade Zip and parts. Controls may be shipped separately, or in same carton as FlexShade Zip.
6. If you have any difficulties with installing, servicing or operating your FlexShade Zip, call your dealer or Draper, Inc., (765) 987-7999.

**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” 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.

**Cleaning and Maintenance**

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

Most of Draper’s standard 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.

[Draper Logo]
Section 1 - Preparation for Installation

1. Make sure mounting surface is strong enough to hold the FlexShade Zip.

   Please Note: It is the responsibility of installer to use appropriate fasteners for the mounting surface.

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 accounted for if mounting over a swinging window or door.

3. Mounting brackets MUST be installed with a gap of 1¾" (45mm) between End Cap and the Mounting Bracket edge (See Fig. 1). Mark wall, jamb or ceiling. Brackets must be spaced no more than 5 feet (152cm).

4. Drill small starter holes (if necessary) in mounting surface.

   *** If Installing Zip 127 Angled Headbox see page 3. ***

Section 2 - Mounting Headbox with Cassette Brackets

Section 2.1 - Wall Installation

1. Attach mounting brackets to wall using #10 flat head screws installed flush with bracket. USE AT LEAST TWO (2) top mounting holes (See Fig. 2-A).

2. Attach Headbox to brackets and tighten Set Screws (See Fig. 2-A).

3. You are now ready to mount Side Channels (See Section 3).

Section 2.2 - Ceiling Installation

1. Attach mounting brackets to ceiling using #10 flat head screws installed flush with bracket. USE ALL FOUR (4) mounting holes (See Fig. 2-B).

2. Attach Headbox to brackets and tighten Set Screws (See Fig. 2-B).

3. You are now ready to mount Side Channels (See Section 3).

Section 3 - Mounting Headbox Permanently to Ceiling or Wall

Section 3.1 - Attaching Mounting Brackets to Headbox

1. Attach Mounting Brackets to the Headbox as a spacer between the Headbox and the wall. Leave a 1¾" (45mm) gap between End Cap and Mounting Bracket (See Fig. 4), and tighten set screws.

Section 3.2 - Removing Roller Assembly

1. Remove screws from bottom of Headbox, remove Fascia and set aside.

2. Remove Quick Release Pin from Idler End of Roller Assembly.

3. Remove Roller Assembly, Idler End first, and set aside.

Section 3.3 - Mounting to Ceiling / Wall

1. Using the mounting holes in the end caps as a guide (See Fig. 6), drill pilot holes on both ends of the Headbox.

2. Attach to mounting surface using appropriate fasteners.

   Please Note: It is the responsibility of installer to use appropriate fasteners for the mounting surface.

Section 3.4 - Reassemble

1. Once Headbox is secured to mounting surface, re-install Roller Assembly*, Quick Release Pin and Fascia.

   *Please Note: If there is no cable exit provided, you must drill one before

2. You are now ready to mount the Side Channels (See Page 2).
**Section 4 - Mounting Side Channels**

**Section 4.1 - Preparation**

1. Use 3mm Hex Wrench to remove Screws from Side Channels and set aside (See Fig. 3).
2. Remove Side Channel Covers.  
   **Please Note:** Do NOT remove the Bottom Caps from Side Channels.
3. For jamb mounting, also remove the Fabric Retainer Strip and set aside.
4. Drill through Side Channels at desired mounting points (See Fig. 4).
5. Mark wall or jamb and drill small pilot holes in mounting surface.

**Section 4.2 - Attaching Side Channels to Mounted Headbox**

1. Insert Side Channel Guide and Fabric Retainers into Side Channels (See Fig. 5).
   
   **Please Note:** Make sure Fabric Retainers go back into Side Channels with Fabric Guide at top of Side Channels and angled leg towards the back (see Fig. 5).

2. Insert “Zipper” on one side of Hem Bar into fabric retainer in Side Channels (see Fig. 6).
3. With “Zipper” engaged in Fabric Retainer (See Fig. 7).
4. Attach side channel to mounting surface using appropriate fasteners.
   
   **IMPORTANT:** Side Channels MUST be installed parallel to each other with a tolerance of +/- 1/8" (3mm).

5. Repeat Steps 2-4 for the other Side Channel.
6. Re-attach Side Channels Covers using the screws removed in Step 1.
   
   **Please Note:** Failure to use provided fasteners to re-attach side channel covers may result in product failure in high wind.
Section 5 - Limit Switch Adjustments

Section 5.1 - Standard and Quiet Motors (All procedures shown are for Standard Roll. Invert orientation for Reverse Roll)

Section 5.1.1 - 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.

Section 5.1.2 - 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 screw 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.

Section 5.2 - Limit Adjustments (RS485 Motors)

For limit setting instructions on these motors, see instructions packaged with the RS485 Address/Limit Setting Tool (part C156.241).

Section 5.3 - Limit Switch Adjustments—RTS Motors

Section 5.3.1 - Programming Instructions

1. Connect power to one motor. Select a transmitter channel to assign motor. Hold UP & 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.

Please note: Failure to complete Step 2 before Step 3 can only be corrected with a motor reset (see Section 5.3.6).

3. Move motor to upper limit position. Hold MY/STOP & DOWN buttons until motor moves down, then release. Use UP & DOWN buttons to move shade to correct lower limit and press MY/STOP.
4. While motor is at lower limit, hold UP & MY/STOP buttons until motor moves up, then release. The shade should move to upper limit and stop.
5. Next, hold MY/STOP button for five seconds until motor jogs.
6. Put motor into USER MODE by pressing small programming button (see fig. 9) on the back of transmitter until motor jogs.
7. Disconnect power to this motor and move to next motor in installation and start with step 1.
8. Reconnect motor to power when all motors are programmed.

Section 5.3.2 - 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.

Section 5.3.3 - 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.

Section 5.3.4 - Delete a Channel - Shade MUST BE in USER mode.

1. Select channel operating motor that you want to keep, 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 5.3.5 - 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 & DOWN buttons until motor jogs.
3. Move motor to its new limit location and hold MY/STOP button until motor jogs.

Section 5.3.6 - Reset Motor

1. Disconnect power for 5 seconds and reconnect to power for 15 seconds. Disconnect power for 5 seconds, then reconnect to power and leave connected. Shade should roll down a few inches and stop.
2. Hold programming button (see fig. 9) for 15 seconds. Motor will jog up and down once; pause and then jog a 2nd time. Motor is now reset and ready to be programmed.
Section 6 - Mounting Headbox - Zip 127 Angled Headbox

The FlexShade Zip 127 Angled Headbox can be mounted permanently to wall or ceiling (See Mounting Headbox - Permanently to Ceiling or Wall on page 1); or Headbox can rest atop Side Channels and is held in place there by two mounting studs coming down from endcaps.

**PLEASE NOTE:** Steps 1-5 of Mounting Side Channels section must be completed before mounting the Zip 127 Angled Headbox.

It is critical that the full length of each Side Channel is secured to the mounting surface.

1. Remove screws from bottom of Headbox, remove Fascia and set aside. (See Fig. 11).
2. Insert "Zipper" on one side of Hem Bar into fabric retainer in Side Channels (See Fig. 12).
3. Insert Headbox mounting stud into Side Channel (See Fig. 12).
4. Return Fabric Retainers to Side Channels and re-attach Covers.

Section 7 - Pocket Installation

FlexShade Zip can also be installed in a pocket in ceiling.

You must provide adequate clearance for removal of Roller Assembly during installation and maintenance.

Minimum depth of ceiling pocket for FlexShade Zip 92 is 4¾" (120 mm), and for FlexShade Zip 127 is 6¼" (158 mm). (See Fig. 10)

Section 8 - Anti-Insect Brush Seals (Optional)

The FlexShade Zip has optional Anti-Insect Brush Seals pre-installed along the width of the fascia. There are also brush seals supplied for each of the side channels that will need to be installed. Remove the double-sided tape and apply to the side channels as shown at right (Fig. 11).

Section 9 - Cable Exit

The FlexShade Zip can be ordered with a cable exit pre-drilled in the top or back of the Headbox. If there is no cable exit provided, you must drill one.

Before drilling out a cable exit, remove the Roller assembly from the Headbox. See Removing Roller Assembly section on Page 1.

Remove all 3 screws from each end of Headbox and drill a 7/16" diameter hole in one of 3 suggested locations in Fig. 12.

After drilling, return Roller Assembly and replace the screws.
**Section 10 - Assembled Dimensions** (Front View)

<table>
<thead>
<tr>
<th>Component</th>
<th>Large: Zip 127</th>
<th>Small: Zip 92</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headbox Height*</td>
<td>5&quot; (127mm)</td>
<td>3½&quot; (92mm)</td>
</tr>
<tr>
<td>Headbox Height**</td>
<td>7¼&quot; (183mm)</td>
<td>5½&quot; (148mm)</td>
</tr>
<tr>
<td>Shade Width</td>
<td>1½&quot; (38mm)</td>
<td>1½&quot; (38mm)</td>
</tr>
<tr>
<td>Fabric Width</td>
<td>1½&quot; (38mm)</td>
<td>1½&quot; (38mm)</td>
</tr>
<tr>
<td>Shade Height</td>
<td>2¼&quot; (57mm)</td>
<td>2¼&quot; (57mm)</td>
</tr>
<tr>
<td>Side Channel Length</td>
<td>2½&quot; (64mm)</td>
<td>2½&quot; (64mm)</td>
</tr>
<tr>
<td>Hembar Length</td>
<td>1¼&quot; (32mm)</td>
<td>1¼&quot; (32mm)</td>
</tr>
<tr>
<td>1½&quot; (38mm)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Large: Zip 127 = 5" (127mm)
Small: Zip 92 = 3½" (92mm)*

**Large: Zip 127 = 7¼" (183mm)
Small: Zip 92 = 5½" (148mm)**
### FlexShade Zip Hardware Dimensions

#### Dimensions - Headbox Styles

<table>
<thead>
<tr>
<th>Headbox Style</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>FlexShade Zip 92</td>
<td>3 5/8&quot; (92mm)</td>
</tr>
<tr>
<td>Square Headbox</td>
<td>3 7/8&quot; (92mm)</td>
</tr>
<tr>
<td>FlexShade Zip 127</td>
<td>5 5/8&quot; (135mm)</td>
</tr>
<tr>
<td>Square Headbox</td>
<td>3 5/8&quot; (92mm)</td>
</tr>
<tr>
<td>FlexShade Zip 127</td>
<td>5 5/8&quot; (135mm)</td>
</tr>
<tr>
<td>Angled Headbox</td>
<td>1 5/8&quot; (41mm)</td>
</tr>
<tr>
<td>Curved Headbox</td>
<td>1 5/8&quot; (41mm)</td>
</tr>
</tbody>
</table>

#### Ceiling Mounting Bracket

- 6" (152mm) x 5 5/8" (135mm) x 3 5/8" (92mm)

#### Wall Mounting Bracket

- 3 5/8" (92mm) x 5" (127mm) x 5 5/8" (135mm)

#### Hem bar Dimensions

- 3 5/8" (92mm)

#### Side Channel Dimensions

- 3 5/8" (92mm) x 5" (127mm) x 4" (102mm)

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### Complete Electrical Connection

The FlexShade Zip 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' 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.

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### Controls & System Overview

#### Sonesse RTS 120VAC Motors

- RTS MOTOR 120V
- Telis 1 RF Remote
- Decora RTS Wireless Keypad

#### Sonesse 120VAC Motors

- 120V MOTOR

**NOTE:** Test shade operation if shade direction does not correspond with the switch orientation, turn power back off and switch the red and black wires from the motor to the switch.

**Do not** wire motors in parallel without written permission from Draper.

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Dashed Wiring by Electrician